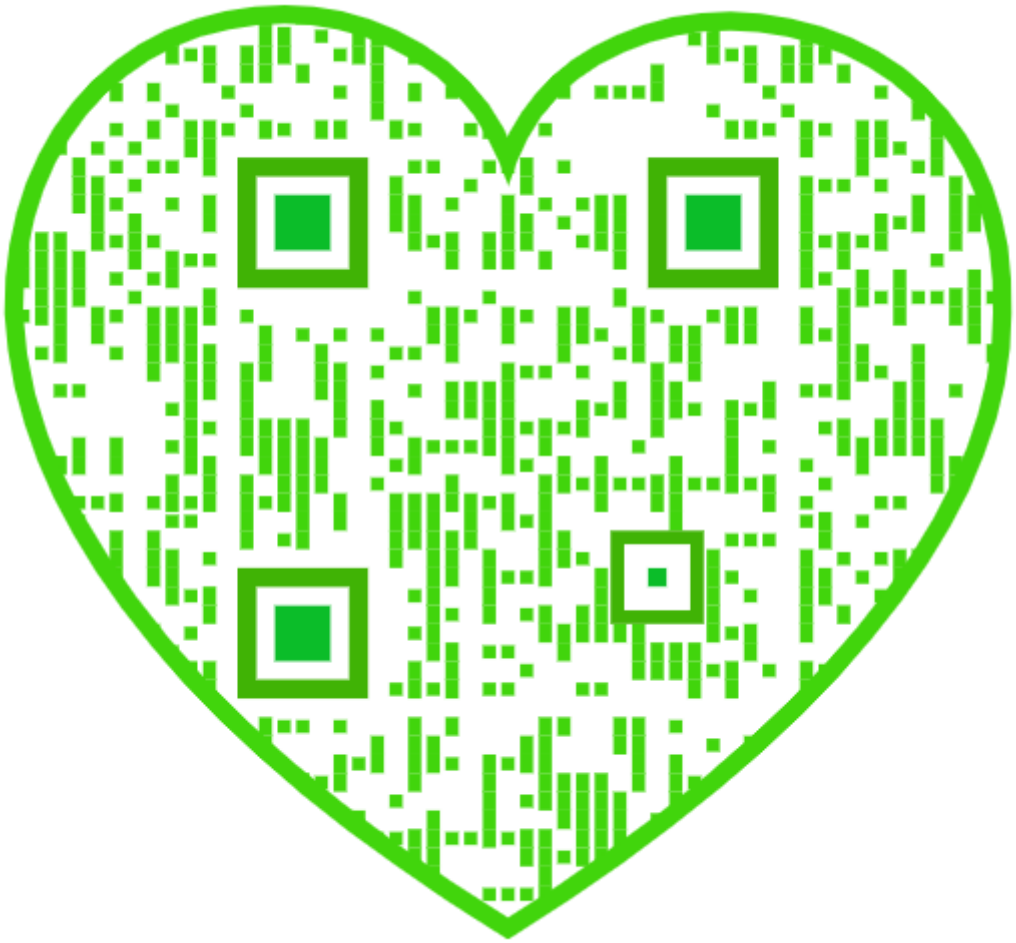
GREAT BUILDINGS AND HOW TO ENJOY THEM

GOTHIC ARCHITECTURE



GOTHIC ARCHITECTURE

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27 Richmond Street West, Toronto

India . . Macmillan & Company, Ltd.
Macmillan Building, Bombay
309 Bow Bazaar Street, Calcutta

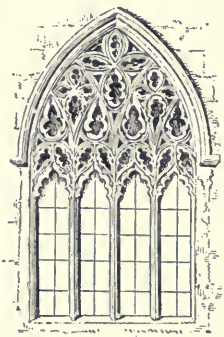
GREAT BUILDINGS, AND HOW TO ENJOY THEM

GOTHIC ARCHITECTURE

BY

EDITH A. BROWNE

CONTAINING FORTY-EIGHT FULL-PAGE ILLUSTRATIONS
REPRODUCED FROM PHOTOGRAPHS



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1906

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PREFACE

This volume will be the first of a series of books whose object is to throw out hints on how to enjoy buildings, unless I have made a mistake in believing that a great many people, like myself, are prone to fall in love at first sight with brick and mortar art-work.

I have always felt a keen joy in the art of architecture, and in my opinion the architect is an artist whose work is as full of expression as is that of the most skilled decorator who serves him. In proportion, perspective, line, and mass he visualizes Universal Truths, and seals them so clearly with the stamp of a strong individuality that they stimulate imagination and awaken the emotions. As a child my favourite playground was the Close in my native city—Nature's unrivalled setting, wherein the dazzling beauty of an English cathedral is enhanced by the fields and trees and grassy swards which surround it, and, maybe, by the river which skirts them on this side or that. Why I liked to look at the cathedral I neither knew nor cared ; it just pleased me, and children ask neither more nor less of life. Under the great vaulted roof I was equally happy and equally indifferent to logic, until I first began to feel that desire to grow up which is the actual starting-point of education. Hitherto I had been content to listen to the endless store of fairy-tales which the building was ever ready to relate, but now I became more exacting.

'Tell me how you came to be here,' I said to the arches, walls, and columns ; 'tell me how you live ; tell me something *real*.'

And they answered that there were certain things that I must

learn for myself if I wanted to hold converse with them in substance as well as in shadow.

Here my trouble began. No one understood the pet names I had given to every little nook and corner of my cathedral, although to my mind they so exactly described what they meant to me—as nicknames always do to the individual who bestows them. But in order to avoid confusion, *this* must mean *this*, by general consent, and *that* must mean *that;* and so I had to learn the conventional names for the different parts of the building before I could speak to other people about them and ask questions. Frequently I received answers to questions that I did not ask, whilst the queries which I actually meant to put forward were ignored; this was due partly to my amateurish way of propounding my difficulties, and partly to the professional ability of those whose aid I sought. I plodded through various ponderous volumes on architecture, and, although I know now how excellent many of them were in their own way, I wished then that I could find someone who would tell me very simply in a few pages what I wanted to know. Just what I wanted then I have endeavoured to set down in the following pages—that, and nothing more; for I feel that there must be many people with a similar desire who have not the time to pick out the essential information from amongst the mass of technicalities in which it is generally embedded.

In whatever direction my readers may wish to pursue the study of architecture beyond where I have here gone, they will find much valuable and reliable literature to assist them, and many noble buildings typical of each and every style. But I hope my humble efforts may do something more than drive them to books, or even buildings which tell of the glory of bygone days: I hope they may be led to demand for themselves buildings which shall declare to future generations all that is best in the religious, civic, and domestic life of the present day.

The publication of so many popular books on old furniture, pottery, and pictures has led to marked changes for the better

within the doors of many of the villas in our monotonous streets. Why should not architecture come in for a share of popular interest, which may lead to a revulsion of feeling against the ugly sameness of the villas themselves? Why should not a building, no less than the people and things within it, contribute to the magic charm of home? Another Utopia? Well, the ruins of each man's Utopia are the foundations of universal progress.

And so, my readers, I would ask you never to still that first throb of pleasure which you feel when you are face to face with a noble building. Pursue it till each one of you is driven to demand for yourself an ideal habitation, every stick and stone of which you can enjoy, and remember that the elements of enjoyment are threefold—innate appreciation, knowledge, and enthusiasm. If you find anything whatsoever in this book which stimulates your instinctive delight in architecture, and helps you to a fuller appreciation of its beauties, I am sure you will forgive any sins of omission and commission. We shall be friends, because we share a common interest in the buildings which are worthy of our affection.

AUTHORITIES CONSULTED

Banister Fletcher : 'History of Architecture.'
Ruskin : 'Stones of Venice.'
Fergusson : 'History of Architecture.'

My thanks are also due to many other authors—my teachers in bygone days—whose names I have forgotten, and to a professional friend from whom I have tried to catch 'hints of the proper craft.' Especially am I indebted to the mediæval craftsmen themselves, many of whose names have never been recorded, but whose fame can never die whilst the buildings they erected endure.

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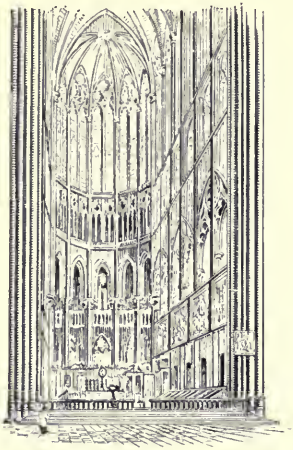
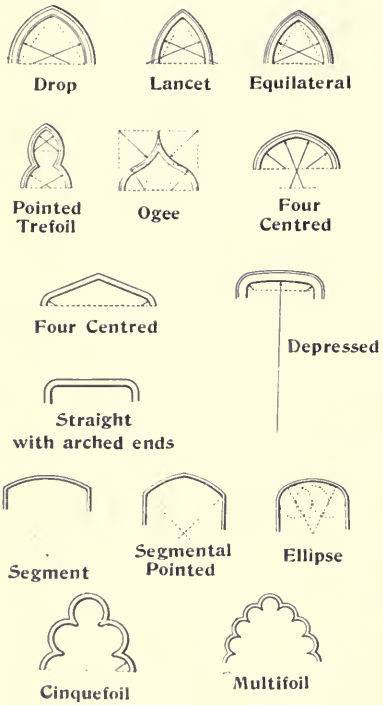
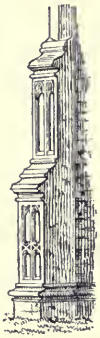


ARCHES

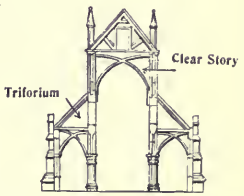


BOSS

BUTTRESS



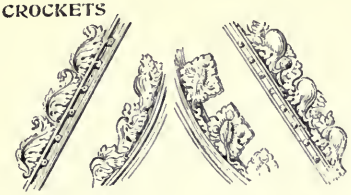
CLEAR STORY
or Clerestory



CORBEL

CORNICE

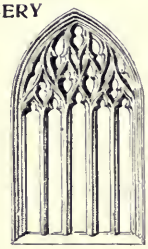
CROCKETS



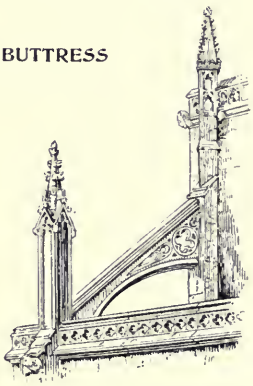
CUSPS

FINIAL

FLAMBOYANT TRACERY



FLYING BUTTRESS



GABLE

GARGOYLE

MOULDINGS

Early English

Decorated

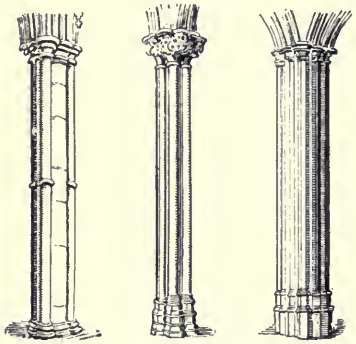
Perpendicular

Tooth Ornament
(Early English)

Ball Flower Ornament
(Decorated)

MULLIONS *See Windows*

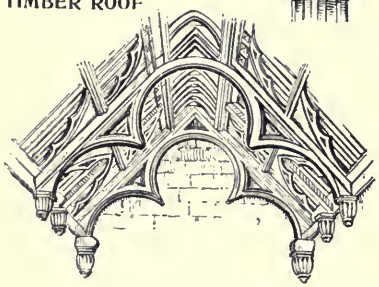
PILLARS OR SHAFTS



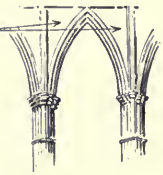
Early English Decorated Perpendicular

PINNACLE

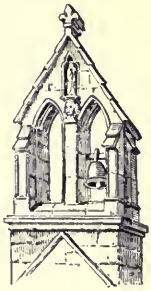
TIMBER ROOF



SPANDRELS



TURRET

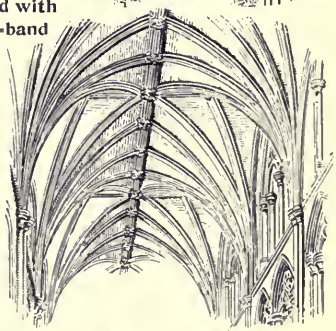


TRIFORIUM *See Clear Story*

VAULTS

Groined with Moulded Ribs (Early English)

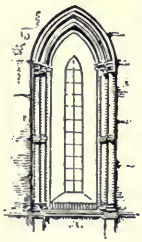
Groined with Ridge-band



Fan-tracery

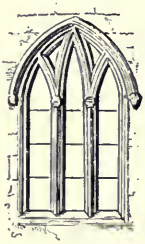
WINDOWS

Early English
(one light)

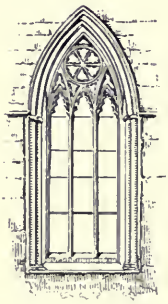


Early English
(two lights grouped under one arch)

Decorated
(Plain)

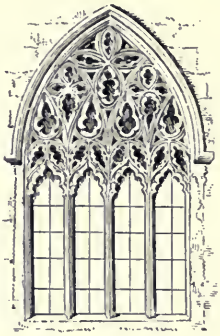


Decorated
(Geometrical Tracery)



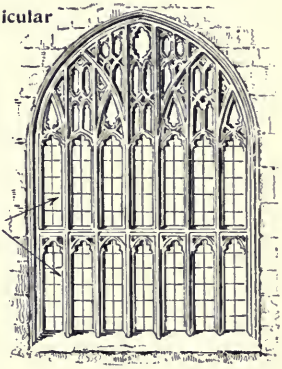
WINDOWS

Decorated
(Flowing Tracery)

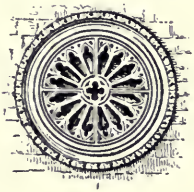


Perpendicular

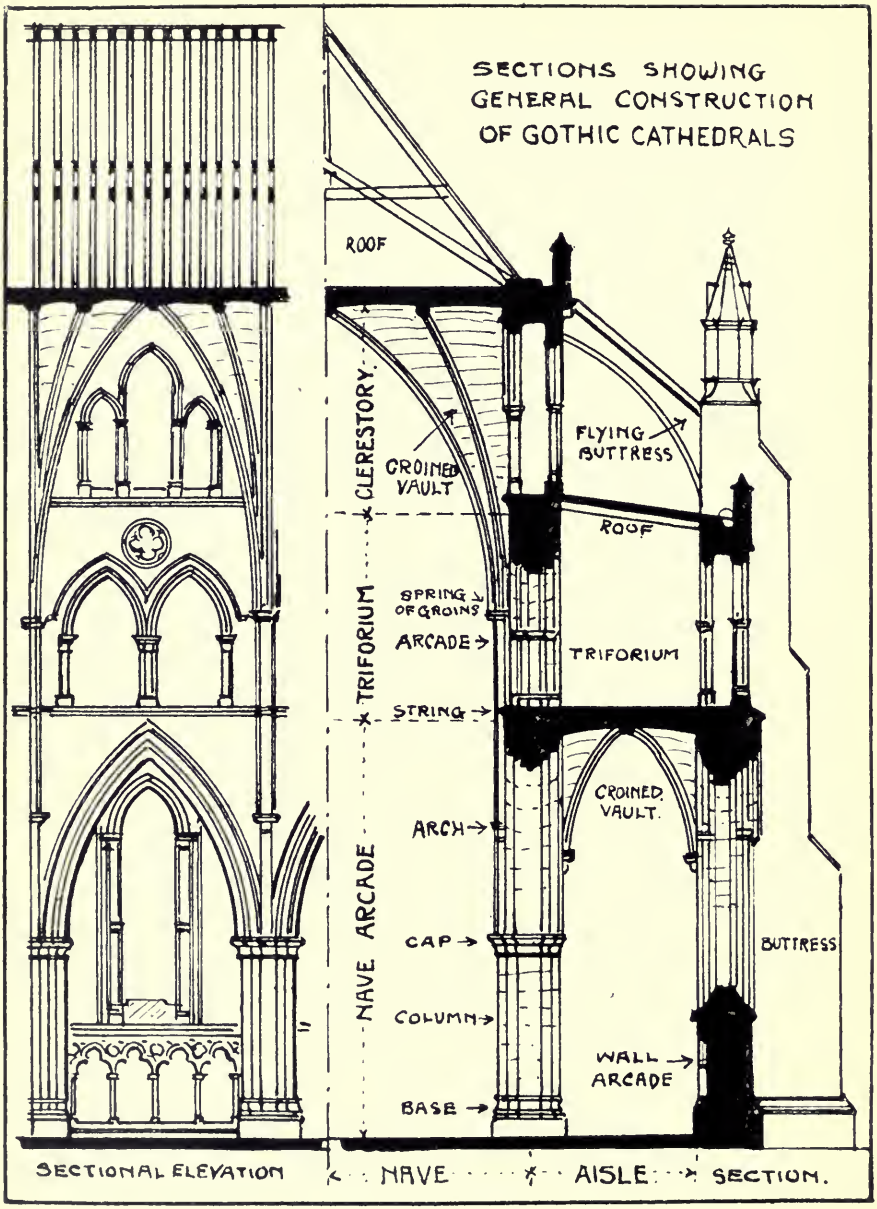
Mullions



Circular



Triangular


SECTIONS SHOWING
GENERAL CONSTRUCTION
OF GOTHIC CATHEDRALS
ROOF
CLERESTORY
CROINED VAULT
FLYING BUTTRESS
ROOF
SPRING OF GROINS
ARCADE
TRIFORIUM
TRIFORIUM
STRING
CROINED VAULT
ARCH
CAP
BUTTRESS
COLUMN
WALL ARCADE
BASE
NAVE ARCADE
SECTIONAL ELEVATION
NAVE
AISLE
SECTION.

GOTHIC ARCHITECTURE

CHAPTER I

THE GOTHIC LANGUAGE

When the religious, social, and political conditions of the Middle Ages have been investigated, and to each has been assigned a particular share in the development of Gothic architecture, it is generally admitted that there is a subtle fascination in Gothic buildings which cannot be accounted for by any of these influences. Nor is this feeling altogether the result of admiration awakened by structural perfection, sublime proportion, or beauty of detail. What, then, is this spell which arrests our footsteps as we approach any of the great Northern cathedrals, makes us pause to think on the threshold of the doorway, and becomes even more potent as we slowly wander up the spacious nave? It is an involuntary response to the magnetic transmission of pure enjoyment.

It does not satisfy us to be told that the Gothic builders were able to achieve such remarkable results because, being neither hampered by tradition nor fettered by conventionality, they could rejoice in their handiwork. There are plenty of men at the present time who have as much freedom of thought allied to freedom of action as those Gothic builders were allowed; but of how many of them can it be said, as we can say of those mediæval artist-craftsmen, 'Divided they stand; united they soar'? Our freemen undoubtedly find pleasure in their work, but it is too often a selfish pleasure, which stamps the individual as a faddist.

The Gothic builder was not only inspired by the delight he experienced in giving expression to his own ideas, but by a direct appreciation of his efforts by brother-craftsmen. As we linger under the arches of any of the noble edifices which were erected under the impulse of mediævalism, the shadows shape themselves into the form of men. Some are carrying a load of stones; some are chanting folk-songs away up in the roof they are vaulting; some are fitting together a cornice on which is chiselled a beautiful design; some are fixing stained glass into the traceried windows; nearly all are actively employed. A few, however, have snatched a moment's respite from their own work, and are moving in and out amongst their brethren, admiring their efforts; and ever and anon there is heard above the noise of tools, the buzz of conversation, and the hum of song, the voice of the master mason exclaiming with enthusiasm, 'Well done!'

Ah! that 'Well done!' How much of all that is so enchanting in Gothic art may we not owe to it! The craftsmen who were able to leave their own stamp on the wonderful buildings which they bequeathed to us did so not only by virtue of the enjoyment they extracted from their work, but through the inspiration drawn from the knowledge that this work was appreciated.

The Gothic masters did not fix any standard of perfection for the labourers as did the Greeks and Romans, but gave them ample opportunity to experiment. The first result was merely the grafting of fresh ideas on to old principles; but by degrees these ideas developed into new principles. As discovery led to discovery, the leaders of the Gothic republican movement did not hesitate to express their delight at finding so much more was being achieved than they had dared to hope for; and what can be a greater stimulus to the labourer than to hear that the whole scope of a great work must be enlarged to embrace the part that he has contributed to it? An employer may pay his men good wages, and even give them an opportunity to exercise their inventive genius, but this is not enough. His artistic interest in their achievements must transcend the commercial

interest. They must all feel that their individual efforts will give pleasurable surprise to somebody before they can work together with the common object of making the world more beautiful, and therefore more enjoyable.

This element of enjoyment has been emphasized because it is to be our chief reason for studying Gothic architecture, but it must not be confused with mere amusement. The word 'study' implies a certain amount of effort, and amusement is only sought by people who are too tired or too bored to make any effort whatsoever. If the enjoyment we are anticipating is to be something which will enrich life, it must be intellectual as well as emotional; intuitive appreciation must be stimulated by acquired knowledge. We expect an architect to know how to design a building, and the builder how to construct it; and surely we should no less expect the man who inhabits it temporarily or permanently to have sufficient knowledge to enable him to enjoy it.

There are not many people to whom a perfect specimen of architecture, and more especially of the Gothic style, does not make a direct sensuous appeal. If the truth of this statement can possibly be doubted, watch the tourist making his first acquaintance with a noble structure. He looks around to the right and to the left, casts his eyes up to the roof and down to the pavement. The pages of a great illustrated volume of history, art, and science are spread open before him; the beauty of the general effect is conveyed to him in the universal language of feeling, but the story is written in a foreign tongue which he cannot understand. That the illustrations have inspired him with a longing to read the text is evident by the attention he gives to the guide-book he carries. That this book merely translates a foreign language into an equally unintelligible dialect is proved by the easy way he falls a prey to the 'authorized guide,' who rattles a bunch of keys as if to suggest that he is the custodian of the necessary dictionary. That this dictionary does not define any of the literary, artistic, or scientific brick-and-

mortar expressions is quite clear when we see the tourist slip a coin into the hand of the personal conductor, and make for the nearest exit. If he never turns his face, but goes straight away in search of refreshment, it may safely be concluded that the involuntary emotional pleasure experienced at the first sight of that edifice has been entirely quenched by subsequent experience. He is probably saying to himself: 'This sort of thing is not in my line; I don't understand it.' If he lingers in the cathedral close, in the market-place or square, to take a last look at the illuminated cover of a people's history, he is undoubtedly thinking, 'How I admire these beautiful old buildings! I wish I understood something about architecture.'

To the sight-seer in either frame of mind we venture to say: 'Why not learn to understand? It is quite simple. Come, let us sit together for a short time where we can look on some Gothic buildings; then we will wander round the outside of them; enter to sit yet again whilst we read the boldly-written story of the interior; then join hands and slowly saunter about to decipher the smaller print in which the details are recorded.'

We must first master the alphabet of any language we desire to learn, and it is advisable to have a few reading lessons. For this purpose we want a teacher, and bearing in mind the object with which we are here going to pursue our study—enjoyment—to whom should we turn but to Ruskin? When we begin to learn the alphabet of architecture and of building under his guidance, we find that it is ABC, and nothing more. An architect must be able to plan, and a builder to construct—

A: Walls to enclose a space for God, you, me, or us.

B: A roof to protect the space enclosed.

C: Openings to allow for exit and entrance, and to admit light and fresh air.

Civilization makes many other demands on their skill, but they are able to reply to any and all of them in the language founded on these three letters.

Directly we think at all about any building, we wonder what

keeps it from falling to the ground. This wonder turns to sheer amazement when we first become conscious that Gothic columns and arches are apparently defying the law of gravitation, for their graceful proportions do not even suggest that degree of stability which is innate in the more massive structural features of other architectural styles. It is not necessary to investigate here all principles of construction, but three facts which have to be recognised in every method of building may be enumerated:

1. Walls are weak, and are not likely to stand upright unless they have foundations which spread out like roots and take a firm hold of the ground.

2. Roofs must be held in position by supports which bear their whole weight by sheer stability or help to maintain balance.

3. Openings for doors and windows are weak spots which must be protected in such a way that they will remain apertures in spite of pressure from above and from either side.

A good general idea of the scientific way in which these difficulties are met and overcome can easily be obtained by watching the building operations which are always in course of progress in any neighbourhood. All such observation will greatly increase the onlooker's capacity for enjoyment.

Now let us try to spell out for ourselves the words in a simple Gothic reading lesson in which there are no foreign quotations. We must ask someone to recommend a suitable text-book, and here we may seek the assistance of general opinion. A sufficient number of reliable authorities agree as to the merits of certain Gothic masterpieces. We shall learn enough from the specimens which bear the label of universal appreciation to form an opinion respecting others marked by the critics 'Doubtful.'

Let us assume that we have before us a genuine Gothic building—a cathedral, for preference, as it will contain all the words with which we want to become familiar. We proceed to spell out first the monosyllables, and next the derivatives, till, finally, we are able to read the first Gothic essay, which runs as follows:

Resting on the nave walls is a gabled roof, supported by flying buttresses, which counteract the thrust of the groining in the arched ceiling and prevent those walls from spreading outwards. Rising from the roof is a central tower, and from the tower springs a tapering spire. The doors and large window apertures have pointed arches with gables overhead. The windows are filled in with stained glass, which is fitted into tracery of exquisite design. Inside the building we notice that the arches which span the clustered columns are pointed, and that some, at least, of the ribs of the vaulted roof partake of the pointed-arch form.

The sculpture and carving have every sign of vitality; shapes and forms adapted from, or suggested by, Nature inhabit an abode quite evidently made by hands, and not ground out by machinery. We are not worried by an insane desire to compare any two designs to see whether they are really quite alike, because each one is so obviously different from the rest. Nor are we impelled to count up the number of squares, circles, or hexagons in a given area, for geometrical precision does not play an insistently conspicuous part in the decorative scheme.

Neither from an external nor an internal view of the building do we take a sweeping glance around. The eye is drawn upwards by a series of piers, caps, mouldings, arches, windows, and groining with its moulded, radiating ribs and bosses. Then, in direct contrast to this vertical perspective, the line of vision assumes a lengthward direction almost immediately, and as the third dimension gradually becomes felt the charm of the whole structure asserts itself.

It is very obvious that every part of the building has some active work to perform, and the burden of some responsibility to bear; consequently there are no assertive ugly and clumsy portions labelled 'For utilitarian purposes only.' What is the something which everything is doing so well in its own way? How does it come about that so much liberty has resulted in this new style of architecture?

To answer these questions we must inquire into the origin of

Gothic principles, and trace their development. Perhaps it will be argued that this should have been done at the starting-point of our investigations, but the spirit of Gothic inspiration seemed to forbid such a method of procedure. If we had first ascertained how the Gothic builders managed to achieve such marvellous results, surely we should have heard them exclaiming in chorus : ' Don't spend your time in trying to copy us, even in imagination. Don't make believe you are children playing with bricks and trying to make them into a pattern. You know now how we constructed our buildings : use that knowledge to enable you to express with your bricks what you feel, and don't echo our ideas.'

But, on the other hand, if we first learn to really see the beautiful edifices erected by these mediæval craftsmen, we feel that the desire to dissect the buildings is a perfectly legitimate one, for only by such means can we actually see into them and fully appreciate their beauty.

CHAPTER II

GOTHIC CONSTRUCTION

When it is asserted that Gothic architecture is of Romanesque descent a truth is insisted upon in paradoxical language, for the name 'Romanesque' implies Roman or Greek origin, whereas the name 'Gothic' was applied as a term of reproach to any building whose style was neither classical pure and simple, nor akin to classical art.

The origin of a name which apparently robs the architecture called thereby of its lineal descent will explain the paradox. When at the time of the Renaissance the war-cry of 'Back to Rome!' was raised, the followers of the *old art* movement were anxious to call the buildings erected in a style they scorned by a sobriquet which should prevent people from associating such work with the classical genealogy of architecture. 'As the Goths brought about the downfall of Roman supremacy,' they said to themselves, 'let us dub the buildings which have temporarily supplanted those with any feeling for classical forms, "Gothic."' The sobriquet is misleading, inasmuch as Gothic buildings were not actually erected by the Goths; but, on the other hand, it does justice to the spirit of the Northern invader which haunted mediæval life. The Goths, together with other tribes of barbarians from the North, wandered abroad and fought many a good fight in the cause of freedom and expansion on classic soil, and they disseminated those germs of life from which, in an evolutionary process through the Byzantine and Romanesque styles, the Gothic style was derived.

The Romanesque builders are responsible for the introduction

of a system which their Gothic successors perfected—the support of balance, as opposed to the earlier principle of a massive dead weight, carrying on its shoulders another dead weight less heavy than itself. It is a commonplace fact that, given a certain burden, one man will carry it more easily and gracefully if it be well-balanced than a much stronger man who has to support it when its weight is not distributed. The Romanesque school first applied this truth to architectural science, but it was the Gothic builders who perfected the discovery that it is possible to put life into stones, whereby they are enabled to relax much of the strain on a support, and to relieve it of that burden of uncompromising pressure imposed on it by inanimate weight.

From the Romanesque builder the Gothic craftsman also learnt to cut his garment according to his cloth. Buildings were already in existence in which the various parts were constructed of small materials of native origin, and not pieced together with imported solid blocks hewn out of distant quarries. But the Gothic builder was not content to copy Greek and Roman forms in local geological products. With him the limited natural resources of a country constituted a direct stimulus to skill. He seized on the materials nearest at hand, and challenged himself to discover what he could do with them.

The remaining portion of the Romanesque bequest was the pointed arch, originally obtained, it is thought, from the Saracens. This is such an essentially Gothic feature that we are apt to think it is a Northern invention, but there is indisputable evidence to the contrary. Nevertheless, to the Gothic builders alone belongs the honour of discovering the possibilities of the pointed arch, and as Gothic vaulting is so essentially an outcome of such discoveries, the principles of Romanesque vaulting scarcely count as a separate influence in the development of Gothic architecture.

In addition to turning the Romanesque inheritance to such good advantage, the Gothic builders contributed two original features to their work—flying buttresses and traceried windows.

Gothic Architecture

The principles of Gothic construction are so easy to understand because they are never hidden from view. Let us take a typical Gothic cathedral and spell out the story of its creation in the simplest language.

We found the alphabet of architecture to consist of three letters —walls, roofs, openings. In the Gothic dialect we read that the walls are not called upon to do much work in the way of supporting the roof; their chief duty is to enclose a space. The skeleton of the roof is composed of ribs which combine to form pointed arches, the spaces between which are filled in, so that we get a number of cross-vaults varying in shape according to the disposition of the ribs. The weight of these vaults is sustained by piers and pillars, or, to be more accurate, by clusters of pillars, each doing its share of an all-important work. But although the actual weight of the vaults is supported so far as downward pressure is concerned, one precaution is necessary to ensure security. Each side of a pointed arch has a very strong tendency to push the other over, and only a perfect balance can prevent a catastrophe.

In order to see how this balance is maintained, we walk outside the cathedral, and there we notice that this lateral thrust is counteracted by props which are joined obliquely to other props descending vertically into the ground. The oblique props are called *flying buttresses*, and the vertical supports are just *buttresses*. The buttresses are weighted at the top by *pinnacles*, which serve the purpose of bearing them down more firmly into the ground, thus rendering them more secure.

Now we have only to see how the doors and windows are able to withstand pressure, and a glance shows that here we have a simpler application of the principles by which the roof is supported. Instead of a superficial space to be filled up in such a way that the building is well protected, there are only the outlines of a space to be maintained for an infilling, which does not appreciably add to the downward pressure. A pointed arch marks the topmost form of the space; on its shoulders it bears

the weight of the materials surrounding it, and these shoulders are supported by columns.

In our particular cathedral we have noted the chief structural features of a Gothic building, but we must specially examine some roofs in other Gothic churches, or we shall get confused by specimens which we are certain to come across. Roofs were not always vaulted; many of them were constructed of timber, and the beams were carried over the space to be bridged in a variety of ways. The picturesque effects obtained by placing the beams of the roof at distances from each other is enhanced by cross-beams and curved principals, the uses of which are obvious.

The various forms of open timber roofs were developed from the *tie-beam* method of construction, which is a very simple one. Laid on to the two walls are the lower ends of a beam, mortised into which are two principal rafters, which meet at various angles and form a triangle. A series of these tie-beams and principals bridge the building from end to end, whilst the tie-beams have curved braces under them. The most important developments of the tie-beam roof were the *trussed-rafter* roof, the *hammer-beam* roof, and the *collar-braced* roof, in all of which greater height is obtained by the ornamental disposition on scientific principles of straight and curved pieces. Speaking generally, open timber roofs partake of one of these forms, unless they are nearly flat, and are merely composed of beams running straight across the space to be covered in, with purlins and principals to give sufficient slope for the purpose of running off water. Over these roofs, as with their vaulted brethren, there is always a strong outer covering—a waterproof overcoat, as it were.

When we come to examine the vaulted ceilings of Gothic buildings, we seem to feel, even though we may have no knowledge to confirm the theory, that the vaults are only draperies, and that the ribs are the really constructive parts of the ceiling. If the ribs were removed, the whole ceiling would fall, in the same way that an umbrella would collapse under similar conditions. But the vaults could be removed, and the skeleton made up of

ribs would still remain exactly as the umbrella would if its covering of silk or cotton were stripped off. Let us imagine that each side of the 'vaults' of an umbrella covering is fastened to a rib; now we shall see that it would be possible to split up the seams on either side of one of its 'vaults' and remove a part of the cover without interfering with the form of the remaining portion. This system of making the ribs constructive was borrowed from later Romanesque buildings by the Gothic builders, who developed and perfected it. It differs essentially from Roman vaulting, in which solid vaults, frequently made of concrete, would suffer no damage if the brick ribs which accentuate their form were removed.

Now that we have some idea of the methods employed by the Gothic builders, we will look at the results of such methods in various countries. We shall find that many local circumstances and local demands combined to give variety of form and purpose to the buildings created during the impulsive period of Gothic inspiration. But it must always be remembered that the underlying constructive principles of the strangely varied designs—perhaps it would be more correct to say the *overlying* principles—are the same. All the complex emotions are developed from a single theme, so simple, so comprehensive, and so intelligible, that we wonder no great musician has expressed them in a Gothic symphony.

CHAPTER III

LOCAL GOTHIC

THE period during which Gothic buildings were erected is, of course, that which lies between the devolution of Romanesque on the one hand and the evolution of Renaissance on the other. To confine this period by dates is misleading, because the various influences at work in the different European countries did not act in concert, but were more or less powerful at particular times according to the religious, social, political, and commercial enthusiasm of each locality.

As Northern France may be called the cradle of Gothic architecture, we will first turn our attention to this country, and take a rapid survey of the principal buildings there which now bear testimony to Gothic energy. We find that such energy coincides with the enormous power of the clergy and the zealous religious indignation which found expression in the Crusades. If men could go to Jerusalem to lay down their lives in the great cause of Christianity, what could those who stayed at home do to show sympathy with the oppressed pilgrims, admiration for their champions, and appreciation of the blessings and privileges of the faith? Working under the inspiration of religious fervour, men had already shown a desire to erect fine cathedrals and beautiful abbeys; but the Crusades made them specially eager to build temples worthy of their God, and fit to be the last resting-place of the bones of saints and martyrs who had died in the Holy Land.

As witnesses to the vigour of religious enthusiasm in France stand the great cathedrals of Notre Dame Paris, Bourges, Chartres,

Rouen, Rheims, Amiens, Coutances, Beauvais, and Bayeux, together with exquisite churches like that of St. Ouen, Rouen, and innumerable other sacred edifices, varying in size and splendour from the perfect little Gothic parish church to the big cathedral, in which the magnificence of the whole is rivalled very often by the pure Gothic of some particular portion.

Temples worthy to be the habitation of man were also reared. The success of the Crusades opened up channels for commercial enterprise, and the wealthy merchants, to whom commerce was a means of gaining a livelihood, and not the end of all the aims and ambitions of life, desired to dwell in houses which would satisfy artistic feeling as well as meet domestic requirements. The house of Jacques Cœur, Bourges, is a worthy example of a merchant's home.

The extant examples of French municipal Gothic testify to the fact that the spirit of the times penetrated communal interests, and of these the Palais de Justice, Rouen, is a noteworthy specimen.

When Gothic architecture was first asserting itself in France, the Norman dynasty was flourishing in England. The enormous influence of Norman activity on building operations in this country is apparent in the style which is named after the Conqueror's dukedom. From this style, the adaptation of which is known in this country under the name of English Romanesque, Early English Gothic was developed, with an increasing spirit of independence refined by Norman culture.

In estimating the influence of the Crusades in England we must remember that these wars eventually became adventurous expeditions, and when an English King, in the person of Richard I., set out for the Holy Land, this was the direction in which they were tending. The minds of Richard's subjects did not dwell so much in his absence on the oppression of Christians abroad as on the desirability of freedom for Christian men at home. Henry II.'s reforms became more and more appreciated as they were more generally put into practice, and the nation was already preparing

to draw up a Great Charter whose refrain should be, 'Britons never shall be slaves.'

But if the religious influence of the Crusades in England was tempered by the desire for general reform, there was not lacking an incentive which could lead men to build beautiful cathedrals and churches.

England was a stronghold of monasticism, and the monks not only stirred up religious enthusiasm, but provided from their coffers the necessary funds for the erection of buildings which were a combination of church, school, factory, and home ; and, furthermore, these monks were the leading masters who taught and practised architecture. Hence, so many of our cathedrals have various adjuncts to the actual building consecrated to Divine worship. Attached to the chapel are the beautiful cloisters in which the monks were wont to wander ; the refectories in which they took their meals ; dormitories ; rooms set apart for the use of guests, who were always sure of food, shelter, and a hearty welcome ; library ; workshops ; scriptorium, where manuscripts were copied and illuminated ; ecclesiastical courts of law, the limits of whose jurisdiction was the subject of so much controversy ; and numerous other buildings necessary to the conditions of life in a monastic colony.

In addition to the cathedrals built by and for the monks, others were erected merely as places of worship at the instigation of patrons who did not throw in their lot with any monastic order.

All such gigantic edifices would naturally take many years to complete, and as the building operations were frequently subject to interruptions, generation succeeded generation and style succeeded style ere they were finished. Thus, in many of our finest cathedrals there is a mixture of Norman work with Gothic in different stages of development.

Gothic architecture in England is generally divided into three periods, and we cannot do better than accept Rickman as an

authority on the dates at which each variation predominated. His divisions of English Gothic are as follows :

Early English	1189 to 1307
Decorated	1307 to 1377
Perpendicular	1377 to 1485

Early English Gothic is a development of Romanesque in its most English aspect, which is Norman. In this style we see the first experiments in endeavouring to obtain stability without massiveness, and the first recognition of height as essential to grace and dignity of bearing. Single pillars give place to groups of shafts, each of which carries a share of the arch which they unite together to support. Flying buttresses release the thrust of the arches on the walls, which, no longer called upon to do so much work, need not be so thick as was previously necessary. High and narrow lancet openings combine with the pointed arches and steeper roofs to draw the eye upwards, and to force the claims of height. Amongst the finest specimens of Early English Gothic, Salisbury Cathedral stands supreme. It was begun and finished within thirty-eight years, which accounts for the uniformity of style that characterizes it.

In the Decorated style more attention is given to ornamentation, as is naturally inferred from the name by which it has come to be known. The decorative possibilities of stained glass becoming enthusiastically recognised, the openings for windows were enlarged, and we get gorgeous colour effects, glowing amidst a network of tracery. Less height is allowed in the triforium, which is the space bounded below by the arches of the nave of a cathedral and above by the clerestory, and there is an advance in the use of the pointed arch in the ribs of the roofs. Parts of Lincoln, York, and Lichfield Cathedrals are typical of this style, as are also some of the cloisters in Westminster Abbey.

Perpendicular is the distinguishing adjective given to that style in which great stress is laid on height by well-marked vertical construction and ornamentation. The windows some-

times have vertical mullions running up in unbroken lines from the base to the arch. The triforium is often abandoned, and only a narrow space intervenes between the vertical mullions of the clerestory windows and the nave arcade. The decorative effects are obtained by simple straight lines which compel us to mentally cut a building up into high and narrow sections when we are estimating the beauty of its form. The walls are practically non-existent. A perfect understanding of the principles of vaulting has relieved them of responsibility, and their place is taken by a shimmering hedge of glass which marks a boundary and encloses a space. That essentially English form of roof construction known as fan vaulting is used in this period, and Henry VII.'s Chapel at Westminster Abbey, which has a fine specimen of such a roof, is one of the best examples of Perpendicular Gothic.

Numerous parish churches testify to the merits of Gothic building in the various stages of its evolution, and Penshurst Place, Kent, may be regarded as an excellent specimen of Gothic domestic architecture in England.

From our own country we return to the Continent, and in the Netherlands we find not only beautiful Gothic churches and houses, but some buildings which call for special attention. These are the town-halls and trade-halls of Belgium, the witnesses that testifiy to the commercial prosperity of the surrounding district in the Middle Ages; the witnesses whose unimpeachable evidence proves that art and commerce can go hand in hand. During the Middle Ages Flanders held a position of the greatest importance in the commercial world. Bruges was the central depot in the North for the distribution of imports and exports; Ghent held the position of honour amongst European manufacturing towns. Side by side with the development of Flemish industries strode the spirit of national independence, and as the chimes resound in the belfries and the echo of their music floats on the air, the voices of the bells tell us how in bygone days they summoned the citizens to fight when national freedom was threatened by foes.

The object of the mediæval trade guilds was to develop industries, not to 'corner' them. Prosperity fell to the lot of the men who banded themselves together in such honourable enterprise; merchants became wealthy, craftsmen became rich, and all citizens became free men. And at the same time there grew up an earnest desire to erect buildings fit for the honourable pursuit of honest trade, for the discussion of commerce, and for the making of laws which should control men and merchandise. So town-halls, and guild-halls, and trade-halls were built; and whether we look at some of the finest examples in Brussels, Bruges, or Ghent, or at some of the less pretentious specimens in the smaller towns, we carry away the same distinct impression—everything useful will tend to be beautiful if the utilitarian demands it answers are *necessary* for the advancement of a worthy cause.

In Germany, where the Romanesque style of building obtained a very strong foothold, Gothic did not readily find favour. Here, as was the case in Italy, the use of bricks resulted in work which has a peculiar fascination, and German Gothic owes much of its beauty to the fact that such material enters largely into its construction. The fervent interest taken in the Crusades, the growth of monastic power, and the great trade-union of the Northern towns, under the name of the Hanseatic League, all exerted an influence on architectural enthusiasm. At first the Gothic style made a tentative claim to recognition in German monastic centres. There are, however, comparatively few evidences of the transitional movement amongst the more important German buildings, which are either frankly Romanesque or a French importation of perfect Gothic. Even in Strasbourg Cathedral, where it is possible to note signs of Gothic evolution from Romanesque, the beautiful nave makes a bold declaration of its French origin; whilst Cologne Cathedral proudly boasts of its close relationship to the cathedrals of Beauvais and of Amiens.

Italian Gothic is markedly Italian in inspiration, although Gothic in achievement. Italian inspiration is classic, and we find

in Italy some of the most exquisite and enchanting Gothic in the world, of a material nature checked by a strong spiritual power. It is just because the Gothic body is always in subjection to the wandering spirit that found its way back to the realms of glory in the Renaissance that Gothic-Italian architecture has such an indescribable charm. It is so essentially human. With the most optimistic philosophy, the classic soul lives on through a passing phase of its eternal life, making that life as beautiful as can be, accepting it joyously, and revelling in it as the germ of its reincarnation in a wonderful world where the inconceivably glorious future of the past is foreshadowed in the perfection of the present. Italian Gothic hints at what 'Renaissance Gothic' might have been if such a style had ever existed.

In Italy we get masterly demonstrations on the artistic possibilities of bricks and terra-cotta, and the decorative effects obtained by the use of these materials must be seen to be fully appreciated. The mention of coloured marbles cannot fail to suggest picturesqueness which can be more readily imagined; but here, again, people seem dubious, when, eyes not having seen, ears hear that there is a subtle charm in walls faced with alternate strips of black and white marble. Once more, seeing only is believing, and believing is only another name for feeling.

Marble-faced walls call up a very different picture from the glass-enclosed cathedrals and churches of Northern countries. Every style of architecture in Italy has to serve a local utilitarian purpose—that of affording protection against the heat and dazzling brilliancy of the sun. Thus, the walls in Italian Gothic buildings are thick, and they are only pierced with small windows. Their stability enables them to bear the pressure of the roofs without the help of flying buttresses, a Gothic feature which we miss in Italy, together with the steep gabled roof. There is, of course, no occasion in such a genial climate for that form of roof which was specially designed to withstand the more exacting atmospheric conditions in the North.

In Italy, owing to reasons which have already been stated, we

can get but a very rough idea of the Gothic movement from the most familiar specimens of so-called typical buildings. Every building erected under this impulse adapts the Gothic style in an individual fashion, and it is only on Italian soil that we can obtain any idea of the way in which even the smallest church is 'typical' of Italian feeling Gothicized. The cathedrals of Milan, Florence, and Siena, the Doge's Palace Venice, and the Ca d'Oro Palace in the same city, may be cited as specimens of ecclesiastical, civic, and domestic Gothic in Italy. When, however, we come to penetrate into the heart of the country, we shall find that we meet with many buildings which in some parts and from some points of view outrival in beauty the fame of the traveller's samples.

The development of Gothic architecture in Spain took place whilst the Moors were still in possession of many parts of the country. The Christians did not actually succeed in expelling the Moors from Spain until nearly the end of the fifteenth century, and as some of the best specimens of Spanish Gothic were erected during the thirteenth and fourteenth and early part of the fifteenth centuries, it is scarcely a matter for wonder that they exhibit many traces of Moorish influence. Mahometan workmen, who were very skilful, are thought to have lent assistance in the building of some of the Christian churches, and on every side the Gothic craftsmen were confronted with the fantastic piles which the Moors had reared. The Moorish love of decoration, as mere finery, infected their conquerors, who seized on every available opportunity for elaborating their own buildings, and went out of their way to make opportunities when none naturally existed. But, however much we may be impressed by the luxurious decorative effects obtained in the cathedrals of Burgos, Toledo, Barcelona, and Seville, we miss in Spanish Gothic that dignity of purpose which elsewhere marks Gothic buildings with the stamp of virility.

CHAPTER IV

GOTHIC ORNAMENTATION

An ornament is essentially beautiful, but beautiful things are not always ornaments. Any number of beautiful things may be placed inside a room, but unless there is a suggestion of homogeneity, the general effect cannot be called decorative. On the other hand, a few less intrinsically beautiful accessories may be added to a bare chamber, and inasmuch as they lose all appearance of being accessories, and seem to be part of a general scheme, they at once become ornamental. This very simple theory of harmonic beauty was so completely understood by the Gothic builders that out of it they evolved the grand principle of decorative construction.

In the first place, their work was so well done that no guilty conscience prompted them to hide imperfections ; and, next, the exquisite beauty of the forms they created was so pleasing to their æsthetic sense that they not only took a delight in the forms, but in the wonderful craftsmanship which gave vitality to them.

'Here we have something beautiful,' they said to themselves. 'Why should we seek to cover it up? Rather let us do everything in our power to accentuate its natural charm.'

So they lavished their love on the various structural parts of the buildings they erected ; they cherished a real affection for the actual forms thereof, so they ornamented them in such a way as to embellish the form without disguising its component parts. Fortunately, they were given a free hand in this matter of decoration. The master craftsmen did not say to their workmen, 'Here is a choice design ; measure it and copy it as exactly and

carefully as possible : you cannot do better.' They left the selection of the ornament to the taste of the man who was going to offer it as a tribute. They knew full well that, with the license of perfect friendship, he would dare to present any gift, and under the inspiration of love he would see that it was tinged with beauty and expressive of individuality.

With absolute freedom to let their imagination run riot, the Gothic artists looked around for a motive power which would start a train of thought, and they discovered that the sanest and most fascinating idealism can be evolved from materialism. So they took Nature as the starting-point of their flights of fancy. In studying her they learnt to appreciate the fact that the world is full of beautiful realities, and they tried to use natural objects, more especially foliage, as a basis of design. Stimulated by idealism, they made their triumphal march in decorative art to naturalism. When, however, they fell under the baneful influence of realism, when they began to make a show of the wonderful things they could do, instead of being content to suggest the more marvellous workings of Nature, the retreat was sounded, and the Gothic artist had to give place to the Renaissance pioneer.

It is quite impossible for the charm of Gothic sculpture to be conveyed through any medium. It must be seen in its varied magnificence to be appreciated, and when a hand can be gently passed over some of its forms, it will be found that the sense of touch reveals many beauties which the eye cannot take in. The sculptural decorations which play no part in structural features have still an important mission to perform. The figures which stand or sit, each in a niche under a canopy, are all mimes in a sacred and secular drama. Christ, the Virgin, Saints, Martyrs, Apostles, Prophets, and Angels, tell us the stories of the Old and New Testaments, whilst Kings and Queens, Church dignitaries, mighty men of valour, and craftsmen, give us a faithful representation of the time in which they lived. These stories are repeated on the various adjuncts of a building, such as on the tombs and pulpits of churches, many of which will certainly offer countless attractions

to the adventurer in quest of æsthetic enjoyment. As, however, we are concerned with the art of architecture, we must here pass on, and give our attention to the decorative sculpture of the structural features of Gothic buildings.

Starting our investigations with the columns which support the roof, we find that the sculptor's art was bestowed on the capitals in such a way as to suggest that they are encircled by foliage growing naturally. There is no hint that the leaves have been clipped by a gardener who wants to dwarf them in order that they may exactly cover a certain blank space. Furthermore, there is no evidence that the soil is only suitable for the production of two or three choice varieties of vegetation. The Gothic sculptor used for his models all the trees and shrubs which flourished in the land where he was at work, so great was the amount of pleasure that he extracted from every specimen that he met with in his everyday peregrinations.

As we turn our attention from the jambs to the tracery of the arches, to the spandrels which intervene between the curve of an arch and its rectilineal frame, to the brackets from which the arches sometimes spring, to the crockets resting on the gables, to niches, to doorway, cornice, pinnacle, or flying buttress, we gradually realize that the Gothic sculptor drew inspiration from every living thing. Man, bird, beast, reptile, tree, and the flower of the field, all furnished him with ideas, and an intense joy in them all entered his soul, and enabled him to put spirit into his work, the while he executed it with a greater or less amount of skill, according to the best of his ability. The Gothic sculptor's actual inventive genius was for the grotesque, which is so perfectly exhibited in the gargoyles, those weirdly fascinating projections which act as water-spouts, and prevent the water from running down the sides of a building by throwing it some distance away from the face of the walls.

The Gothic builders obtained highly decorative effects from the lights and shades made by the mere disposition of mouldings. When the sculptor's aid was requisitioned to enhance such effects,

we find that the insistent limitations of space did not force him to work from geometrical designs. The characteristic dog-tooth decoration of Early English mouldings was surpassed by the exquisite ball-flower ornament of the Decorated style, which may be rivalled, but can hardly be said to be outrivalled, by the endless variety of designs in which leaves and flowers and fruits, together with grotesques, figure so conspicuously. The brick and terra-cotta mouldings and ornaments in Italy have a distinct charm of their own.

The development of traceried windows, which form such a characteristically ornamental feature of Gothic buildings, is a specially interesting study, but only a few details are absolutely essential to a general understanding of the evolutionary process thereof. The aperture bounded above by a single arch became in early Gothic divided vertically into two parts, each part being contained under a pointed arch within the outer arch boundary. The irregular triangular-shaped mass of solid stone between the soffit of the upper arch and the heads of the lower ones was pierced at first with very simple openings, but gradually these openings were multiplied in number and connected in design. Either they formed a circular light or rose window in the middle of the stonework, or the stone was penetrated all over, so that the tracery lines made a network of the whole surface, which had previously been of solid stone. In the latest development of English Gothic—the Perpendicular style—the stone is cut in such a way that the vertical mullions appear to extend right away from the base of the window to the surrounding arch, under which they are filled in for some distance down with geometrical patterns.

Although tracery at first consisted of geometrical shapes, these were woven in such endless variety that the monotonous note of pattern work entirely disappeared even before the lines assumed that flowing character which has the greatest charm.

Towers and spires as ornamental features of Gothic churches need but mere mention by name. The emotional power of the

latter has never, perhaps, been better expressed than by Robert Browning in his poem 'Old Pictures in Florence.' He imagines that Giotto meant the Campanile there to be surmounted by a spire, but that the design was lost, and the famous tower has therefore been left in an incomplete state. Then he fancies that the lost design has been recovered, and preparations are set on foot for finishing the Campanile. What Browning would have felt if only he could have lived to see his dream come true we realize as we read the closing lines of the poem :

> 'Shall I be alive that morning the scaffold'
> Is broken away, and the long-pent fire
> Like the golden hope of the world unbaffled
> Springs from its sleep, and up goes the spire—
> As "God and the People" plain for its motto,
> Thence the new tricolor flaps at the sky?
> Foreseeing the day that vindicates Giotto
> And Florence together, the first am I!'

Although we may entirely disagree with Browning that the exquisite Campanile is incomplete, we are glad that he thought so, in that his belief enabled him to so effectually translate the spire's message to us in that simple word 'hope.'

The wood-carver and sculptor were in spirit, and very often in body, one and the same in Gothic art, but the metal-worker and painter, who also came to the assistance of the Gothic builder, did so chiefly when his share of the work was finished. For these reasons we merely accord these other craftsmen a passing reference. Their work will be made manifest by a careful examination of the doors of a building, of the furniture and fittings within, and of the frescoes on the walls, and so often will these be clearly stamped 'Gothic' that no difficulty will be experienced in understanding them sufficiently well to appreciate them.

Whether we look at a Gothic building from within or from without, we cannot but feel that the decorative artist fully realized the emotional properties of light and shade, of colour and of form, and that his work is a robust testimony to liberty of thought and freedom of action.

CHAPTER V

THE LAST DAYS OF GOTHIC

It is somewhat difficult to arrive at a fair estimate of the means by which the Renaissance movement encompassed the downfall of Gothic architecture. Sometimes we hear that the extravagant and corrupt forms of late Gothic or Perpendicular were bound to bring it to ruin; at other times we are told that Gothic was the victim of circumstances which nothing could have withstood.

Now, the very commonplace fact that the Renaissance originated in Italy and first influenced Italian Gothic is worthy of some thought. Corruption usually sows the seeds of a revolution, and the first outbreak is most likely to occur where corruption is most rife. Following the general course of a popular outburst of resentment, we should certainly expect to have to look for the earliest signs of architectural discord in the North, where voluptuous design joined hands with unworthy technical experiment to cause dissension in the Gothic camp. But it was in the South, where a reverence for classic forms had always kept Gothic architecture in check, that the Renaissance style first found favour, and the movement spread over Europe, not as a revolution, but as an infection.

Although Gothic architecture was undermined by excess, the disease bred in its bones was not foul enough to kill it, even where such disease had most encouragement to develop. It was suffering from what may be called 'sleeping sickness' when Europe was suddenly infected with the 'know thyself' desire. Men overlooked the fact that the ailing invalid's disease had

been contracted in this very process of self-development. The Revival of Learning ought to have proved an antidote to the poison in the Gothic body, and restored it to health and strength—given it a new lease of life in an atmosphere now more suited to its nature. If people had only understood that Gothic art was the work of men who were Renaissance pioneers in the age of mediævalism, they would have snatched it out of the clutches of disease; they would have felt that its true mission was to give birth to an heir to whose individual beauty it could bequeath ancestral glory. But they were too occupied with other things to think whether it was worth while to nurse Gothic architecture back to health.

When we inquire into the nature of the Gothic malady, we find that it was literally a case of complications; simple principles were lost sight of in conceited moodiness, and confusion resulted.

One of the most apparent signs of disease in Gothic architecture is to be found in the traceried windows. The solid stonework was originally pierced for the utilitarian purpose of letting in light, but in course of time the reason for such perforations was wholly obscured. The stonework was merely regarded as the raw material out of which were to be cut as many lines intersecting each other at as many points as possible. Tracery was no longer the outline of useful and beautiful openings, but the openings became subordinate to the intricate design which was cut out of the stonework.

Then the mouldings were made to look as if they ran through each other, the appearance of which leaves the same impression of trickery that we experience when we see a living man at a variety show with a spear apparently run through his body.

Soon the pillars were no longer surmounted by a capital. The moulding of the arch was made to look as if it were continued down to the ground and encircled by a pillar whose duty was to enclose a leg of the arch in a boot specially designed to hide it from view, as in so many late Perpendicular buildings. Furthermore, the flying buttress was used as an ornament when

the method of construction did not make it a necessary structural feature.

Simple truths appropriately enriched by ornamentation thus became elaborate lies overcharged with decoration, and before Gothic architecture had a chance to get back into the right path it was buried alive by the Renaissance.

The saddest reflection which its fate provokes is that it did not ‘ fall by course of Nature's law ’ in the process of evolution. It was overwhelmed by a storm which blew up from the classic shore, bringing along with it a ‘ fresh perfection ’ in architectural style which drew no breath of life from the Gothic fount.

But there is hope! Be it remembered that Gothic architecture was buried *alive!* Its extraordinary vitality has enabled it to defy death, and it will surely live on till it gives birth to a new style, destined to excel it by right of a more perfect beauty as yet undreamed of.

ILLUSTRATIONS

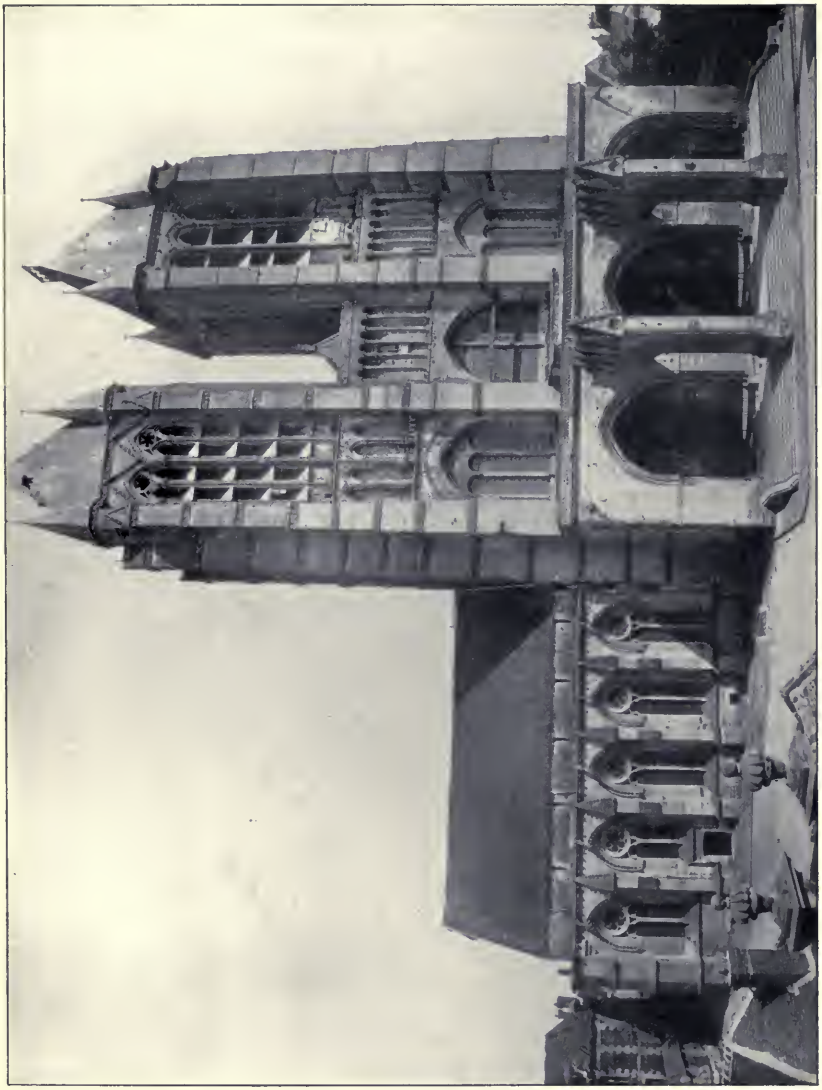
NOYON CATHEDRAL

DEPARTMENT OISE, FRANCE

HISTORICAL NOTE.—On the authority of Viollet-le-Duc, we fix the date of this cathedral somewhere about 1150.

ARCHITECTURAL NOTE.—A fine specimen of Early French Gothic, this building shows the circular arch still in use. The feature of its plan is the triapsal design of the choir and transepts.

GENERAL NOTE.—Viollet-le-Duc, in his interesting 'Lectures on Architecture, states that Noyon Cathedral was built by Bishop Beaudoin II., a friend of Suger, Abbot of St. Denis; and he points out that this cathedral 'presents analogies of a very striking character to the parts still extant of the Abbey Church.'



Neurdein Frères.

ST. DENIS

DEPARTMENT SEINE-ET-OISE, FRANCE

HISTORICAL NOTE.—The work of construction was commenced in the twelfth century under the direction of Abbé Suger. The west front was dedicated in 1140, and a further dedication of the church took place four or five years later. Subsequently it underwent many alterations. It was much damaged during the Revolution, but has since been restored.

ARCHITECTURAL NOTE.—St. Denis is regarded as an excellent example of earliest French Gothic. According to Fergusson, 'it terminated the era of transition, and fixed the epoch when the Northern pointed style became supreme, to the total exclusion of the round arched style that preceded it.'

GENERAL NOTE.—Suger, who began to build this abbey church, became Abbot of St. Denis in 1122. He was a great statesman, and for a time ruled France as Regent, but as St. Bernard disapproved of the resplendent manner in which he upheld the dignity of his official position, he retired, in all humility, to the Abbey of St. Denis, where he died in 1151.

St. Denis was the burial-place of the Kings of France.

Neurdein Frères.

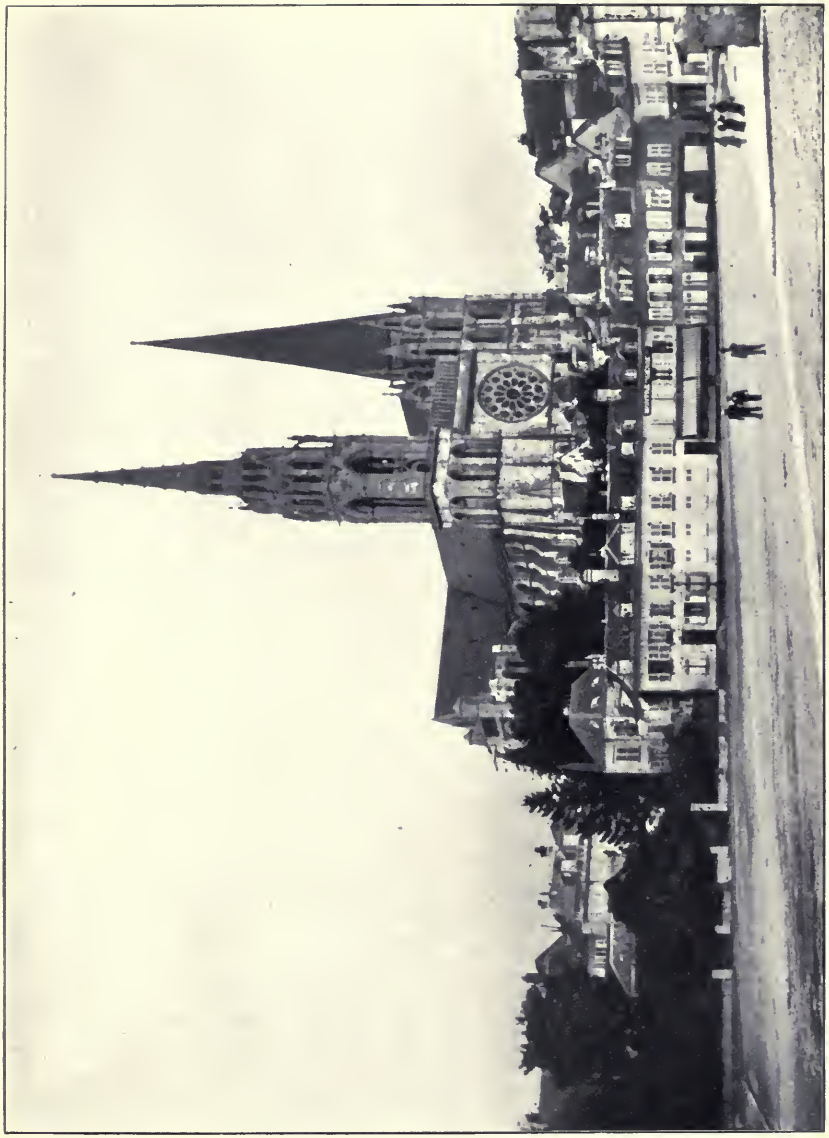
CHARTRES CATHEDRAL

DEPARTMENT EURE ET LOIRE, FRANCE

Historical Note.—This cathedral is built on the site of a church erected by Bishop Fulbert during the early half of the eleventh century. The older building was almost completely destroyed by fire, and the present cathedral was commenced somewhere about 1134, and consecrated in 1260.

Architectural Note.—The great width of this cathedral is out of proportion to its length and height; nevertheless, the general effect produced by its grandeur has been summed up by no less an authority than Walter Pater, who says: 'Dependent on its structural completeness, on its wealth of well-preserved ornament, on its unity in variety, perhaps on some undefinable operation of genius, beyond, but concurrently with all these, the church of Chartres has still the gift of a unique power of impressing. In comparison the other famous churches of France—at Amiens, for instance, at Rheims, or at Beauvais—may seem but formal, and to a large extent reproducible, effects of mere architectural rule on a gigantic scale' (Gaston de Latour).

General Note.—The cathedral is rich in the possession of some beautiful old stained-glass windows. The perusal of some book dealing with the evolution of the art of glass-painting will add greatly to the enjoyment of the pleasure-seeker who lingers to examine this decorative feature here or elsewhere. Amongst many excellent volumes dealing with the subject L. F. Day's 'Windows: A Book about Stained and Painted Glass' may be recommended.



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NOTRE DAME

PARIS, FRANCE

HISTORICAL NOTE.—The famous cathedral at Paris was commenced in 1163, under the direction of Maurice de Sully. Building operations were pushed on rapidly; the choir was finished in 1185, and the cathedral practically completed in the early part of the thirteenth century. It was greatly damaged during the Revolution, but restored between 1846 and 1879 by Viollet-le-Duc.

ARCHITECTURAL NOTE.—Form: Latin cross, with central aisle, double side aisles, and surrounding chapels.

The principal façade, surmounted by two square towers, is considered to be one of the finest extant examples of façades executed in the Middle Ages.

GENERAL NOTE.—An interesting critical description of the front of Notre Dame is to be found in Viollet-le-Duc's seventh lecture on architecture. It is too lengthy to quote, but its perusal will amply repay for the trouble of reference.

Victor Hugo's fascinating chapter in 'Notre Dame de Paris' on this building, which he calls 'a symphony in stone,' achieves its avowed object. It actually 'restores for the reader's benefit that admirable church,' and should on no account be left unread by those who would justly appreciate this triumph of artistic architecture. Not only does Victor Hugo rebuild the old Notre Dame for our benefit, but in criticising the 'degradations and mutilations which time and men have both caused this venerable monument to suffer,' he arrives at some noteworthy conclusions concerning the modern appearance of old Gothic. 'Three sorts of ravages to-day disfigure Gothic architecture,' he says: 'wrinkles and warts on the epidermis—this is the work of time; deeds of violence, brutalities, contusions, fractures—this is the work of the revolutions from Luther to Mirabeau; mutilations, amputations, dislocation of the joints, *restorations*—this is the Greek, Roman, and barbarian work of professors, according to Vitruvius and Vignole.'

Neurdein Frères.

BOURGES CATHEDRAL

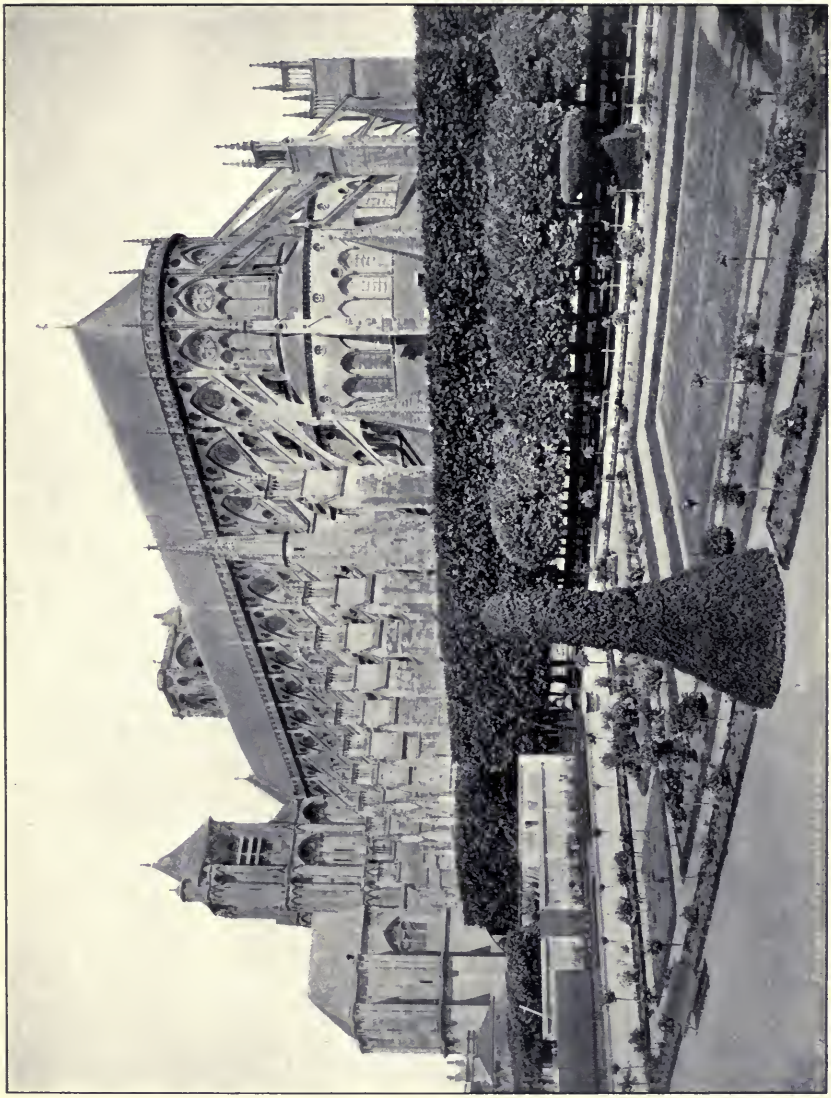
DEPARTMENT CHER, FRANCE

HISTORICAL NOTE.—Commenced in 1190, this cathedral is practically thirteenth-century work.

ARCHITECTURAL NOTE.—Bourges Cathedral is actually very short in comparison with its width, but the absence of transepts counteracts the difference, and prevents it from detracting from the beauty of the church. It has aisles of varying heights, graduated from the nave to the outer aisles. Fergusson gives these heights as follows :

Central aisle	...	...	...	117 feet.
Two inner aisles	...	...	...	66 „
Two outer aisles	...	...	...	28 „

GENERAL NOTE.—Bourges Cathedral is generally considered to be one of the finest ecclesiastical buildings in France.



Neurdein Frères.

ROUEN CATHEDRAL

DEPARTMENT SEINE INFERIEURE, FRANCE

HISTORICAL NOTE.—A church built in the eleventh century on the site of Rouen Cathedral, was almost completely destroyed by fire in 1200, only a portion of the north-western tower being saved. The work of rebuilding occupied the intervening period up to the sixteenth century.

ARCHITECTURAL NOTE.—Plan: Latin cross, 427 feet long, with aisles completely surrounding it, and three chapels leading out from the choir.

'This remarkable building . . . was erected with a total disregard to all rule, yet so splendid and so picturesque that we are almost driven to the wild luxuriance of nature to find anything to which we can compare it. Internally its nave, though rich, is painfully cut up into small parts. The undivided piers of the choir, on the contrary, are too simple for their adjuncts. Externally, the transept towers are beautiful in themselves, but are overpowered by the richness of those of the west front. The whole of that façade, in spite of the ruin of some of its most important features, and the intrusion of much modern vulgarity, may be called a romance in stone, consisting as it does of a profusion of the most playful fancies. Like most of the cathedrals near our shores, that of Rouen was designed to have a central spire; this, however, was not completed till late in the *cinque-cento* age, and then only in vulgar woodwork, meant to imitate stone. That being destroyed, an attempt has lately been made to replace it by still more vulgar ironwork, leaner and poorer than almost anything else of modern times' (Fergusson).

The vaulting is quadripartite.

GENERAL NOTE.—The south-western tower of this cathedral is named the Butter Tower, as the building expenses were defrayed out of money paid to the Church for permission to eat butter in Lent.

Paul Limon.

RHEIMS CATHEDRAL

DEPARTMENT MARNE, FRANCE

HISTORICAL NOTE.—The cathedral of Notre Dame, Rheims, was built on the site of a church burnt in 1211, and it was consecrated in 1241. The façade dates from the fourteenth century.

ARCHITECTURAL NOTE.—The façade, with its three portals, exquisite rose window, and 'gallery of the kings,' surmounted by graceful towers, is regarded as a masterpiece. The interior of the cathedral is so well planned and proportioned that Fergusson considers the nave to be 'one of the most perfect in France.'

GENERAL NOTE.—The kings of France used to be crowned at Notre Dame, Rheims, and the original nave had to be lengthened to afford accommodation for the vast numbers of people that flocked to the coronations.

Paul Limon.

AMIENS CATHEDRAL

DEPARTMENT SOMME, FRANCE

HISTORICAL NOTE.—This cathedral was commenced in 1220, and completed in 1257. It was damaged by fire in 1258, and the restorations were completed about 1272.

ARCHITECTURAL NOTE.—Judged by the interior, Notre Dame d'Amiens is considered to be one of the finest French Gothic cathedrals. 'All who enter this cathedral are struck with the apparent grandeur of the whole and the perfection of the respective proportions,' says Viollet-le-Duc, who also calls the building 'The Parthenon of Gothic architecture,' and his opinion is endorsed by a chorus of authorities. The external view is, however, less satisfactory. 'The external effect of Amiens may be taken rather as an example of the defects of the general design of French cathedrals than as an illustration of their beauties,' says Fergusson, and he justifies his criticism by reference to the towers which are too small in proportion to the building, and the overpowering effect of the 'gigantic incubus of a roof.'

GENERAL NOTE.—In 'The Bible of Amiens' (Part I. of 'Our Fathers have Told Us'), Ruskin acts as an inspiring guide to this cathedral.

Neurdein Frères.

BEAUVAIS CATHEDRAL

DEPARTMENT OISE, FRANCE

HISTORICAL NOTE.—This cathedral was commenced in 1225, and dedicated in 1272. In 1284 the roof fell in, and when it was rebuilt additional pier supports were added. The transepts date from the sixteenth century; a spire, 486 feet high, was added in the same century, but in 1573 it fell to the ground.

ARCHITECTURAL NOTE.—Beauvais Cathedral was designed to rival the cathedral at Amiens close by, begun a few years earlier. The dominant note here is *size*, but the sacrifices made to emphasize it are summed up by Fergusson as follows:

'Taken altogether the cathedral of Beauvais may be considered as an example of that "vaulting ambition that o'erleaps itself." Every principle of Gothic art is here carried to an extreme which destroys the object with which it was designed, and not only practically has caused the ruin of the building and prevented its completion, but has so far destroyed its artistic effect as to make it an example of what should be avoided rather than of what should be followed.'

GENERAL NOTE.—There are some very fine stained-glass windows in this cathedral.

Neurdein Frères.

SAINTE CHAPELLE

PARIS, FRANCE

HISTORICAL NOTE.—St. Louis determined to build a chapel worthy to be the abiding place of two precious relics which he had obtained from the Emperor of Constantinople—the Crown of Thorns and part of the Holy Cross. The architect Pierre de Montereau was entrusted with the commission, and the result was the Sainte Chapelle, begun in 1242, finished in 1247, and consecrated in 1248.

ARCHITECTURAL NOTE.—The royal chapels of Sainte Chapelle and the now demolished St. Stephen at Westminster are frequently compared. The most comprehensive comparison has, perhaps, been drawn by Fergusson. 'In dimensions, on plan,' he says, 'they are not dissimilar; both are raised on an under-croft or crypt of great beauty. The French example has the usual apsidal termination; the English the equally characteristic square east end. The French roof is higher and vaulted; the English was lower and of wood. It is impossible to deny that the French chapel is very beautiful, and only wants increased dimensions to merit the title of a sublime specimen of Gothic art; but the English example was far more elegant. All the parts are better balanced, and altogether it was a far more satisfactory example than its more ambitious rival, of the highest qualities to which the art of the Middle Ages could attain.'

GENERAL NOTE.—Pierre de Montereau, the architect of the Sainte Chapelle, was also the architect of the famous refectory, and of the beautiful chapel of Notre Dame in the Monastery of St. Germain des Prés, Paris.

Neurdein Frères.

BAYEUX CATHEDRAL

DEPARTMENT CALVADOS, FRANCE

Historical Note.—The work of this cathedral dates back, for the most part, to the latter half of the twelfth century, although parts of the western towers were erected during the time of Odo, Bishop of Bayeux, and the crypt is thought by some authorities to be even earlier Norman work.

Architectural Note.—The lower part of the nave is Norman work, and the spandrils of the arches are richly diapered. Externally, Bayeux Cathedral is for the most part Gothic, although the lantern of the central tower is Renaissance work, and the cupola and flèche are modern. The west front is particularly striking. It has five pointed arches, with the main entrance pierced in the central one, and there are smaller doors in the arches on either side of it; the four outer archways have gables, but there is no gable over the main door. The lower part of the towers which crown the façade are Norman, but the upper part and the spires are early Gothic.

General Note.—The famous Bayeux Tapestry, now kept in the town-house, is believed to have passed into the possession of the cathedral immediately on its completion. Although there is considerable difference of opinion as to its date, the evidence of two good authorities tends to prove that the work is contemporaneous with the date of Odo's cathedral. The Rev. J. Collingwood Bruce, in 'The Bayeux Tapestry Elucidated,' thinks that Queen Matilda, who is supposed to have done this cross-stitch record of Norman events, may very probably have given it to William I.'s half-brother Odo, and that it is equally probable that he presented it to his church. Professor Freeman says: 'I believe that it was made for Bishop Odo, and that it was most likely designed by him as an ornament for his newly-built cathedral church of Bayeux.'

Neurdein Frères.

COUTANCES CATHEDRAL

DEPARTMENT MANCHE, FRANCE

HISTORICAL NOTE.—Coutances Cathedral was erected during the first half of the thirteenth century.

ARCHITECTURAL NOTE.—This cathedral is an example of architectural 'beauty unadorned.' It cannot boast of much in the way of sculpture, but there is a distinct charm in the artistic effect of its simplicity. It has two western towers and an octagonal lantern at the intersection of the nave and transepts.

GENERAL NOTE.—Fergusson considers the lantern of Coutances to be the best specimen of the earlier French lanterns, and that of St. Ouen, Rouen, one of the finest specimens of later date.

Neurdein Frères.

THE ABBEY CHURCH OF ST. OUEN

ROUEN, DEPARTMENT SEINE INFERIEURE, FRANCE

HISTORICAL NOTE.—This church was commenced in 1318. The choir and transepts were approaching completion in 1339, when the Hundred Years' War broke out and delayed the work. Building operations were proceeded with at intervals up to the sixteenth century. The western façade was only completed during the last century.

ARCHITECTURAL NOTE.—This church bears striking testimony to the emotional power of proportion, and it is justly famous for the poetic disposition of the parts which unite in forming 'the most beautiful and perfect of the abbey edifices of France.'

GENERAL NOTE.—In common with every visitor who happens to have the good fortune to be taken round St. Ouen by one particular guide, we quote the verger on Ruskin. The delightful old custodian, who has nor voice, nor manners, nor airs of the ordinary lion showman, proudly boasts that he heard Ruskin proclaim St. Ouen the most perfect pure Gothic building ever erected.

Neurdein Frères.

HOUSE OF JACQUES CŒUR, BOURGES

DEPARTMENT CHER, FRANCE

HISTORICAL NOTE.—This building was erected during the first half of the fifteenth century.

ARCHITECTURAL NOTE.—The House of Jacques Cœur is considered to be one of the finest examples of French domestic architecture. 'There is a court-yard in the centre of the building, the entrance being under a low tower. Arcades give on to the court, which is also marked by a fine staircase turret. A vaulted chapel on the first floor has interesting colour decoration, the cells being painted with angels. The lower part of one side is built upon Roman work' (Banister Fletcher).

GENERAL NOTE.—Jacques Cœur was a wealthy and influential merchant and a great financier, who was born at Bourges towards the end of the fourteenth century. In 1436 he was summoned to Paris, and made master of the mint by Charles VII., who was bent on getting rid of all the counterfeit coin which had been circulated during the reigns of his predecessors. High honours were thrust on Jacques Cœur, and he negotiated treaties of great importance. The great trader was at the height of his glory when his enemies prevailed on the King to turn against this influential favourite. Under various pretexts he was accused of many crimes, and, although obviously innocent, he was pronounced guilty, and his sentence included confiscation of his property, and exile. He died in 1456.

Neurdein Frères.

CANTERBURY CATHEDRAL

KENT, ENGLAND

HISTORICAL NOTE.—Canterbury Cathedral stands on the site of an old Roman church which was destroyed and rebuilt by Lanfranc. The choir of the later church was afterwards rebuilt by Anselm. This choir was destroyed by fire, and rebuilt yet again about 1175 under the direction of William of Sens, who adapted his design in order to preserve two old Norman chapels. The nave and centre tower are of later date, the nave being rebuilt in the fourteenth century, and the central tower completed about 1500.

ARCHITECTURAL NOTE.—A distinctly French influence is felt in the choir of Canterbury. At the extreme east is the chapel known as 'Becket's Crown,' and there are numerous side chapels which add to the foreign appearance of the cathedral. The central tower is Late Perpendicular in style.

GENERAL NOTE.—The thirteenth-century glass in the windows of the choir is famous. L. F. Day, in his 'Windows,' says: 'Chances favourable to the study of early glass in England are not very many. A series of thirteenth-century windows is rare. The one fine series of medallion windows is at Canterbury Cathedral, in the round-headed lights of the choir.'

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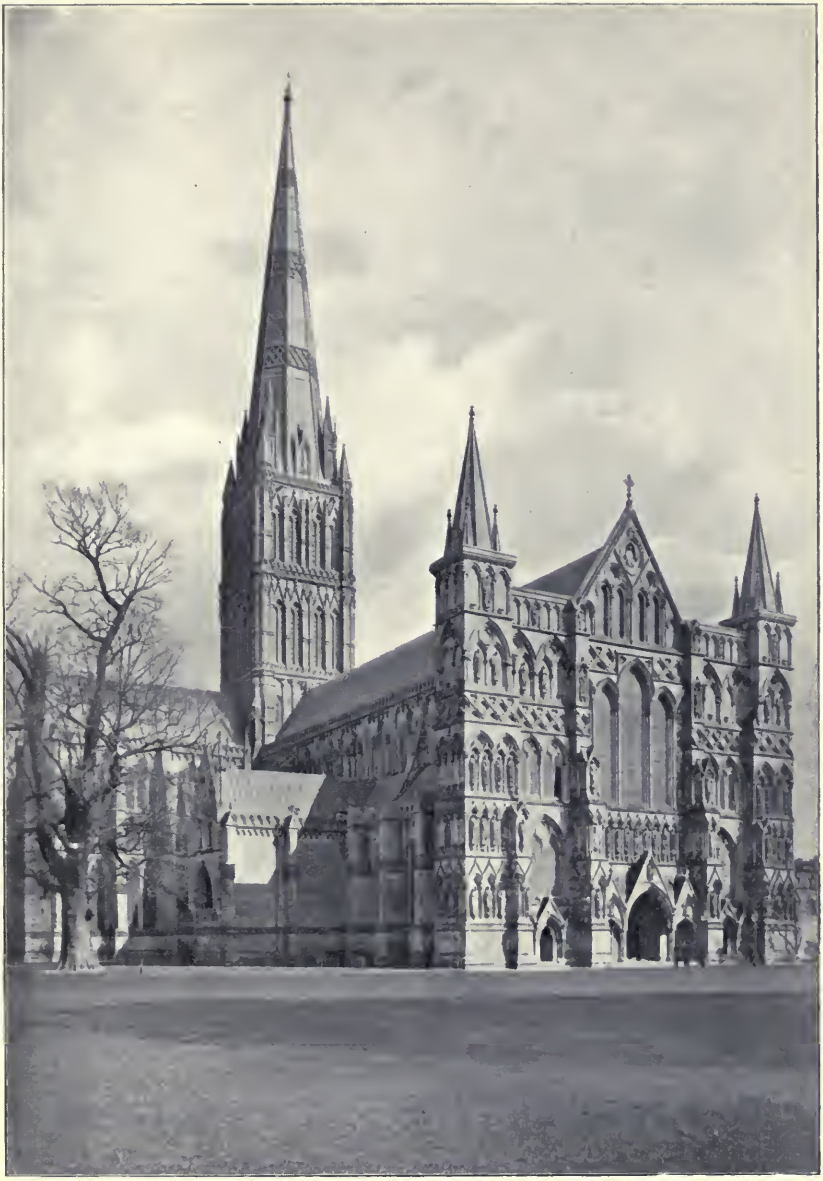
SALISBURY CATHEDRAL

WILTSHIRE, ENGLAND

HISTORICAL NOTE.—The foundations were laid in 1220, and the cathedral dedicated in 1258. The cloisters and chapter-house were added a few years later. The tower dates from 1331, and the spire was erected between 1335 and 1375.

ARCHITECTURAL NOTE.—This cathedral being begun and finished within such a short space of time is uniform in style, and is the typical example of Early English Gothic. It comprises a nave with aisles and a fine north porch, double transepts, a choir, a presbytery, and a Lady Chapel. The beautiful spire, which is 404 feet high, is the loftiest in England.

GENERAL NOTE.—Like so many of our English cathedrals, that at Salisbury stands within a close, in which are also the episcopal palace, the deanery, and other buildings connected with the cathedral.



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WESTMINSTER ABBEY

LONDON, ENGLAND

HISTORICAL NOTE.—The present cathedral, built on the site of Edward the Confessor's Norman church, was commenced in the reign of Henry III. The eastern portion, including the choir and transepts, was erected by him, and Edward I. carried on the work. The nave was not completed till the fifteenth century, and the western towers—the work of Wren—not till the eighteenth century.

ARCHITECTURAL NOTE.—The choir shown in our illustration is Early English in style, but Fergusson points out that the east end of Westminster Abbey is an adaptation of a French design. 'Henry VII.'s Chapel now occupies the space formerly occupied by the Lady Chapel,' he says, 'but before it was pulled down the circlet of apsidal chapels was as completely and as essentially French as are to be found in the country where that feature was invented.'

GENERAL NOTE.—In the chapel of Edward the Confessor, or the 'Chapel of the Kings,' between the choir and Henry VII.'s Chapel, is the shrine of Edward the Confessor. Here also are the coronation chairs, with the famous stone of Scone, the coronation seat of the ancient Kings of Scotland and Ireland. Since the Conquest all the English Sovereigns, with the exception of Edward V., have been crowned at Westminster.

Stereograph, Underwood and Underwood.

YORK MINSTER

YORKSHIRE, ENGLAND

HISTORICAL NOTE.—York Cathedral is built on the site of a seventh-century wooden church, which was replaced by a stone basilica in the time of King Edwin. After a fire in 1069 the church was rebuilt by Archbishop Thomas, of Bayeux, but only a small part of this work remains. The choir and crypt were reconstructed by Archbishop Roger about 1154-1191. The transepts date from the thirteenth century, the nave and reconstructed choir from the fourteenth century, and the towers from the fifteenth century. The cathedral was completed in 1472. During the last century there were extensive restorations owing to damage by fire, etc.

ARCHITECTURAL NOTE.—The cathedral is in the form of a Latin cross, including a nave with aisles, transepts, choir with aisles, central tower, and two western towers. The west front is considered to be the finest façade in England, and Bruton says that the window over the door is 'an unrivalled specimen of the leafy tracery that marks the style of the middle of the fourteenth century.' The choir is Late Perpendicular, and the central tower a Perpendicular lantern tower. The transepts, which are the oldest part of the building, are Early English.

GENERAL NOTE.—The famous lancet windows in the north transept of York Minster are known by the name of the Five Sisters. The legend about them is related in 'Nicholas Nickleby.'

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LICHFIELD CATHEDRAL

STAFFORDSHIRE, ENGLAND

HISTORICAL NOTE.—Nothing remains of the old Norman cathedral. The present building dates from the thirteenth century.

ARCHITECTURAL NOTE.—This building is mixed in style, being in part Early English and in part Decorated, whilst there is Perpendicular tracery in many of the windows. The three spires, rising one from the central tower, and one from each of the western towers, are the distinctive feature of this cathedral, and are known as the 'Ladies of the Vale.' The nave shown in our illustration is a good specimen of the Decorated style.

GENERAL NOTE.—The clerestory windows are of spherical triangular form, and Fergusson explains the artistic advantage of this. He points out that in the early method of vaulting the 'lines of the clerestory windows do not accord with the lines of the "severeys" of the vaults,' and adds that the triangular form of the clerestory windows at Lichfield afforded 'a perfect solution of the difficulty, and gave a stability and propriety to the whole arrangement that never was surpassed.'

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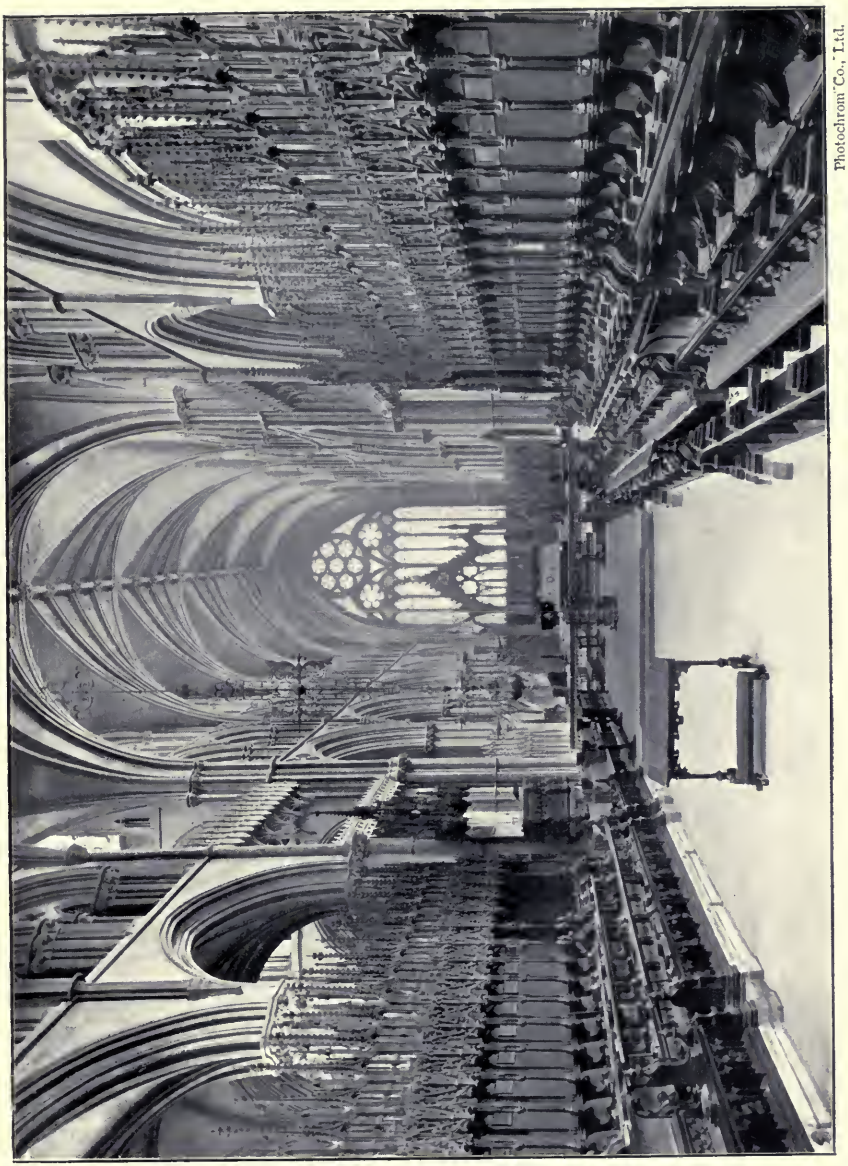
LINCOLN CATHEDRAL

LINCOLNSHIRE, ENGLAND

HISTORICAL NOTE.—The first church built by Bishop Remigius was consecrated in 1092, and the west front of the present building is part of the original fabric. The three west portals and the Norman part of the west towers date from about the middle of the twelfth century. In 1185 there was a great earthquake, and the minster was so greatly damaged that it had to be almost completely rebuilt. The work of rebuilding was carried on under St. Hugh.

ARCHITECTURAL NOTE.—This cathedral embraces every variety of style, from Norman to Late Decorated. The Angel Choir shown in our illustration is in the Decorated style, and is considered to be the finest example of this period. It dates from 1258-1288, and the choir screen from 1280. The east window is also famous.

GENERAL NOTE.—'It is probably to St. Hugh, of Lincoln,' says Fergusson, 'that we owe the first perfect vault in England. Coming from Burgundy, he must have been familiar with the great vaults which had been constructed in his country long before the year 1200, when he encouraged his new followers to undertake one not necessarily in the Burgundian style, but in that form with which they were conversant from their practice in erecting smaller side vaults. He built and roofed the choir of Lincoln, immediately after which (1209-1235) the nave was undertaken by Hugh of Wells, and its roof may be taken as a type of the first perfected form of English vaulting.'



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HENRY VII.'S CHAPEL

WESTMINSTER ABBEY, LONDON

Historical Note.—This chapel, which is built on the site of the Lady Chapel, dates from the beginning of the sixteenth century.

Architectural Note.—Doors on which the Tudor rose and various other Tudor devices figure prominently in the scheme of design lead into this chapel, which is a magnificent example of Perpendicular Gothic. It has a nave, aisles, and an apse with five small chapels. The roof is an exquisite specimen of fan-tracery vaulting.

General Note.—This chapel is a royal burial-place. In it is the tomb of Henry VII. and his Queen, Elizabeth of York, and here, too, are buried Edward V., Edward VI., Queen Mary, Queen Elizabeth, Mary Queen of Scots, James I., Charles II., William and Mary, Anne, and George II.

S. B. Bolas & Co., London.

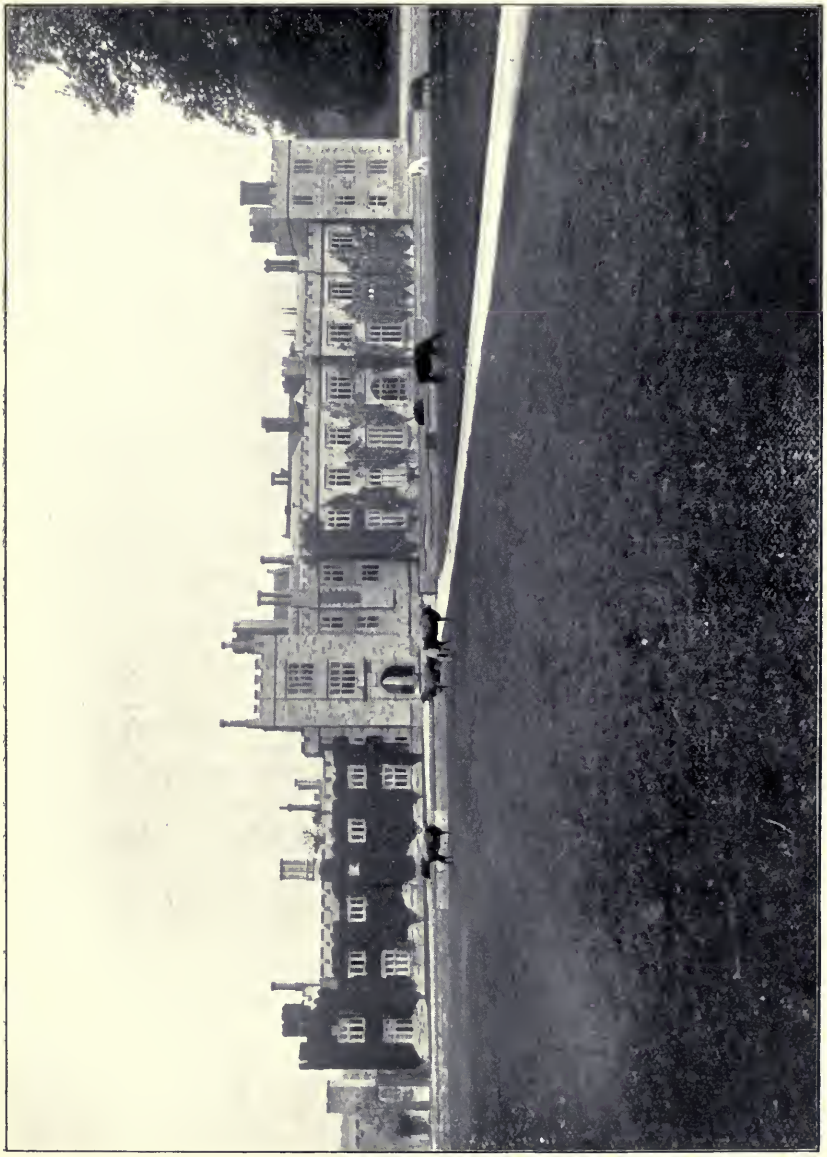
PENSHURST PLACE

KENT, ENGLAND

HISTORICAL NOTE.—Penshurst Place is a fourteenth-century house, but the different parts are of various dates, and there have been many modern restorations.

ARCHITECTURAL NOTE.—The feature of this house is the Banqueting Hall, built about 1341. The open timber roof to it is remarkably fine; the hearth is in the centre of the Hall, and the Minstrels' Gallery at one end, as in a typical house of the time; some of the old oak tables are still in existence.

GENERAL NOTE.—Penshurst Place was given to the Sidneys by Edward V.; it is believed to have been the birthplace of Sir Philip Sidney, and the Park is said to have suggested some parts of his 'Arcadia.'



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BRUSSELS CATHEDRAL

BELGIUM

Historical Note.—The cathedral of Ste. Gudule is built on the site of an eleventh-century church; the present structure dates from the thirteenth century.

Architectural Note.—This cathedral has a nave, with aisles, choir, transepts, and three chapels. The façade has two fifteenth-century towers, with a central gable.

General Note.—In the Chapel of the Holy Sacrament are kept the Miraculous Hosts, which are said to have been stolen by the Jews in 1370, but restored to the cathedral because they bled in the synagogue, where they were transfixed with knives. These same Hosts are carried in an annual procession to celebrate the miracle.

Paul Limon.

ANTWERP CATHEDRAL

BELGIUM

Historical Note.—This cathedral was commenced in the fourteenth century, and finished in 1518.

Architectural Note.—Antwerp Cathedral is peculiar in that it is divided into seven aisles. The effect is picturesque, but the general proportions of the building dwarf its actual size.

General Note.—In this cathedral are Rubens' famous pictures: 'The Descent from the Cross,' 'The Elevation of the Cross,' and 'The Assumption.'

Levy et ses Fils.

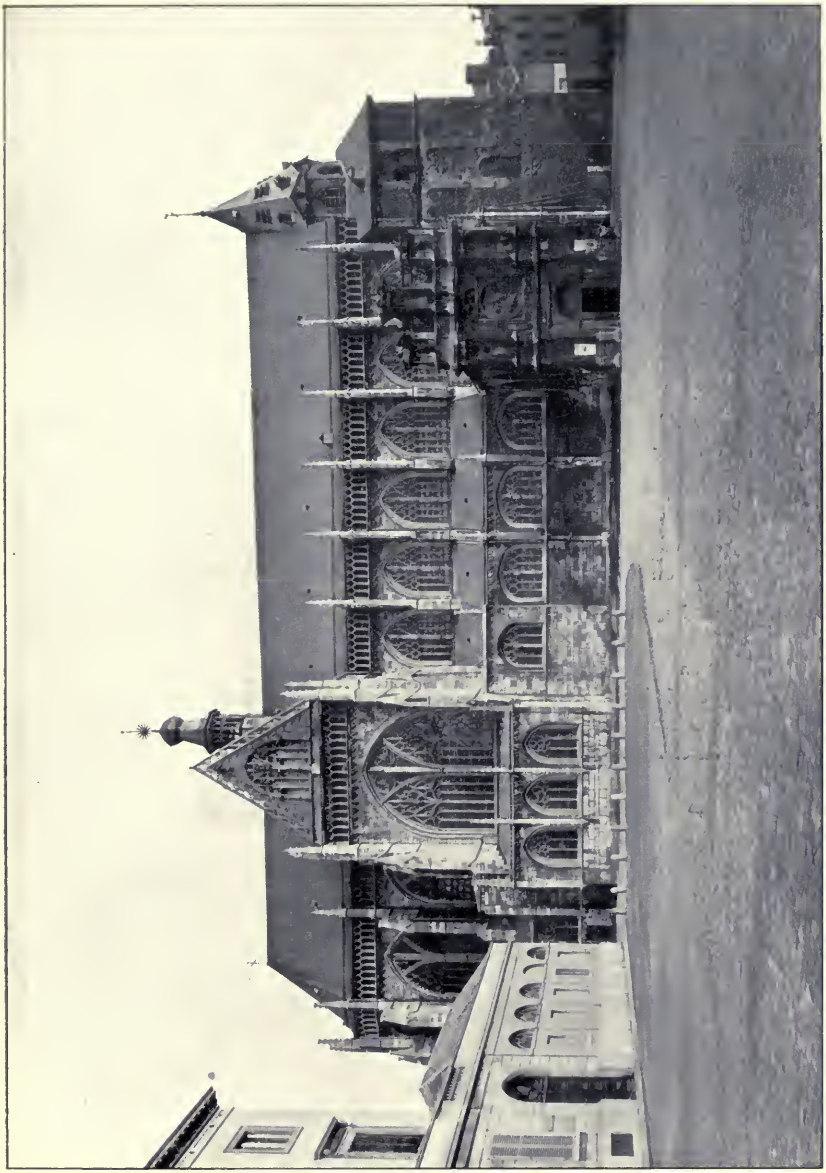
CHURCH OF ST. JACQUES, LIÈGE

BELGIUM

HISTORICAL NOTE.—The present church dates from the sixteenth century.

ARCHITECTURAL NOTE.—This church is 'of the second class in point of size, being only 254 feet in length internally, by 92 feet across the nave. At the west end it still retains the screen of the old church. . . . The principal entrance is a splendid porch of flamboyant design on the north. The east end may be said to be a compromise between the French and German methods, for it is not a chevet, inasmuch as it has not the circumscribing aisle, while its circlet of chapels prevents its being considered as a German apse. Altogether the plan is characteristic of its locality on the borders of France and Germany' (Fergusson).

GENERAL NOTE.—The whole of this church, including the roof, is gorgeously decorated with paintings, which retain their decorative qualities.



Levy et ses Fils.

THE BELFRY OF BRUGES

BELGIUM

HISTORICAL NOTE.—This tower was begun about the end of the thirteenth century and finished towards the end of the fourteenth century.

ARCHITECTURAL NOTE.—The belfry consists of three stories, the two lower ones being square, and the upper one octagonal in form. It is considered to be one of the most artistically designed bell-towers in Europe. The Town Hall on either side thereof is Early Gothic in style.

GENERAL NOTE.—The belfry of Bruges contains a very famous set of chimes. Longfellow's 'Belfry of Bruges' and 'Carillon' should be read.

In the Middle Ages a bell-tower was a symbol of independence. Permission to possess a bell was a privilege granted by charter, and the bell was rung to call the citizens to arms in time of war and to discussions on civil matters in time of peace.

Deloeul.

OUDENARDE TOWN HALL

BELGIUM

Historical Note.—This building was erected during the early half of the sixteenth century.

Architectural Note.—The Town Hall at Oudenarde, in its profuse ornamentation, exhibits signs of the lateness of the period to which it belongs. Fergusson points out that 'even the effect of the belfry is spoiled by the temptation to exhibit a masonic trick, and make it appear as if standing on the two slight pillars of the porch.'

General Note.—The portal of the Council Chamber was executed by a master wood-carver, Paul van der Schelden.

Levy et ses Fils.

STRASBOURG CATHEDRAL

GERMANY

Historical Note.—The eastern part of the cathedral dates from the eleventh or twelfth century. The nave was probably begun early in the thirteenth century, and finished about 1275. The western façade was commenced in 1277, and the spire added in the fifteenth century.

Architectural Note.—The beautiful Gothic nave of this cathedral ranks among Germany's architectural splendours. Erwin von Steinbach is responsible for the western façade, but its proportions have been much criticised, and the details have been condemned as 'wire-drawn and attenuated.'

General Note.—In 'The Golden Legend' Longfellow makes Elsie speak in rapturous terms of Strasbourg Cathedral, and in reply to her question, 'Who built it?' Prince Henry answers:

> 'A great master of his craft,
> Erwin von Steinbach: but not he alone,
> For many generations laboured with him.
> Children that came to see these saints in stone,
> As day by day out of the blocks they rose,
> Grew old and died, and still the work went on,
> And on, and is not yet completed.
> The generation that succeeds our own
> Perhaps may finish it. The architect
> Built his great heart into these sculptured stones,
> And with him toiled his children, and their lives
> Were builded, with his own, into the walls,
> As offerings unto God.'

F. Frith & Co.

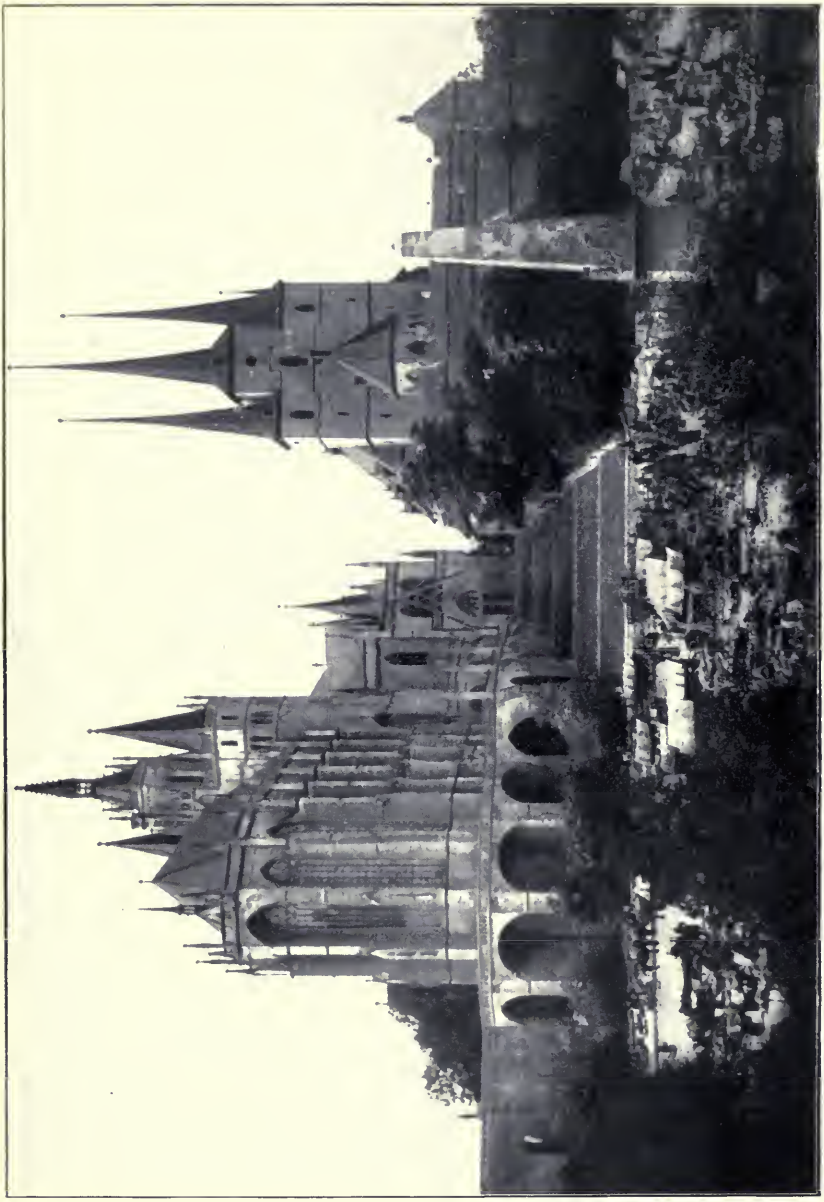
ERFURT CATHEDRAL

GERMANY

Historical Note.—This cathedral was commenced about 1153 on the site of an earlier cathedral. The present choir was begun in 1349, and soon after the reconstruction of the nave was undertaken. The building, which was damaged by fire in the fifteenth century and by lightning in the eighteenth century, and which suffered much damage during the siege of 1813, has undergone a considerable amount of restoration.

Architectural Note.—'The cathedral at Erfurt is a highly ornamental building, but, though possessing beautiful details in parts, yet it shows the slenderness of construction which is so frequent a fault in German Gothic buildings' (Fergusson).

General Note.—In one of the towers is the great bell 'Maria Gloriosa,' cast in the fifteenth century. The original bell, cast in 1251, was melted by a fire which partly destroyed the cathedral.



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COLOGNE CATHEDRAL

GERMANY

HISTORICAL NOTE.—The present building was begun about 1270, although the date is sometimes fixed as early as 1248. The choir was completed in 1322.

ARCHITECTURAL NOTE.—Cologne Cathedral is the largest cathedral in the north of Europe. In plan it is very similar to Beauvais Cathedral. The nave has double aisles, but the general proportions are such that the great height of the building is much exaggerated.

GENERAL NOTE.—'It would not be easy to find finer instances of Late Gothic German work than the five great windows on the north side of Cologne Cathedral. There, too, one has only to turn right about face to compare early sixteenth-century with nineteenth-century German practice. . . . The garish modern transparencies show, by their obvious shortcomings, the consummate accomplishment of the later Gothic glass painters' (L. F. Day, in 'Windows').

Levy et ses Fils.

ST. LAWRENCE, NUREMBERG

GERMANY

HISTORICAL NOTE.—This church was commenced about 1275, and finished in the fifteenth century.

ARCHITECTURAL NOTE.—The Church of St. Lawrence is small, but beautifully proportioned. 'Externally, the western front, though on a small scale, only 250 feet in height, is better proportioned and more pleasing in its detail than almost any other double-spire façade in Germany' (Fergusson).

GENERAL NOTE.—In this church is the beautiful Gothic Tabernacle for the Host, executed towards the end of the fifteenth century by the Nuremburg sculptor, Adam Krafft. Referring to this work of art, Longfellow says in his poem 'Nuremberg':

> 'In the church of sainted Lawrence stands a pix of sculpture rare,
> Like the foamy sheaf of fountains, rising through the painted air.'

F. Frith & Co.

ST. STEPHEN'S, VIENNA

AUSTRIA

HISTORICAL NOTE.—This church was begun in 1300, and finished in 1510.

ARCHITECTURAL NOTE.—St. Stephen's has three aisles, which are nearly equal in width and height; it has no clerestory, no triforium; one roof covers in the whole structure, spanning the three aisles; the vaults are traceried, and magnificent colour effects are produced by some beautiful windows. It is designed to have two spires; the one that is complete is considered to be one of the most beautiful spires in the country.

GENERAL NOTE.—This church takes a prominent place amongst the best examples of German ecclesiastical Gothic.

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AIX-LA-CHAPELLE CATHEDRAL

GERMANY

Historical Note.—This cathedral consists of two parts; the older portion was designed by Charlemagne for his tomb, although some authorities say that it was rebuilt by Otho III.; the more modern part is the Gothic choir, added during the latter half of the fourteenth and beginning of the fifteenth centuries.

Architectural Note.—The circular portion of the church is said to have been planned on the model of San Vitale at Ravenna. Externally it is a sixteen-sided polygon, but internally eight piers support the dome. The present Gothic choir was added to the original structure.

General Note.—In this cathedral is the tomb of the great Roman Emperor Charlemagne, who died at Aix-la-Chapelle in 814. Speaking of this structure, Fergusson says: 'It was built by the greatest man of his age, and more emperors have been crowned and more important events have happened beneath its venerable vaults than have been witnessed within the walls of any existing church in Christendom.'

TOWN HALL, BRUNSWICK

GERMANY

Historical Note.—The Town Hall was begun in the thirteenth century, and completed in the fifteenth century.

Architectural Note.—This is one of the best examples of German civic architecture.

It will be seen that the mullions of the windows are cut short and supported by arches.

General Note.—At the time this building was erected Brunswick occupied a place of honour in the Hanseatic League—that great mercantile union which had such a powerful influence on trade.

George Meyer.

SAN FRANCESCO, ASSISI

ITALY

HISTORICAL NOTE.—This church was commenced in 1228, and consecrated in 1253.

ARCHITECTURAL NOTE.—This is one of the earliest churches in Italy which is markedly Gothic. It is peculiar in that it comprises an upper and a lower church.

GENERAL NOTE. — Amongst the numerous frescoes for which it is famous are those by Giotto showing scenes from the life of St. Francis, with allegorical representations of the vows of the Franciscans—Poverty, Chastity, and Obedience.

St. Francis, who founded the monastic Order of the Franciscans, or Grey Friars, was born at Assisi in the year 1182. He believed that poverty was the highest Christian grace, and his followers had to beg their daily bread. The Order of Grey Friars was first introduced into England at Canterbury.

Alinari.

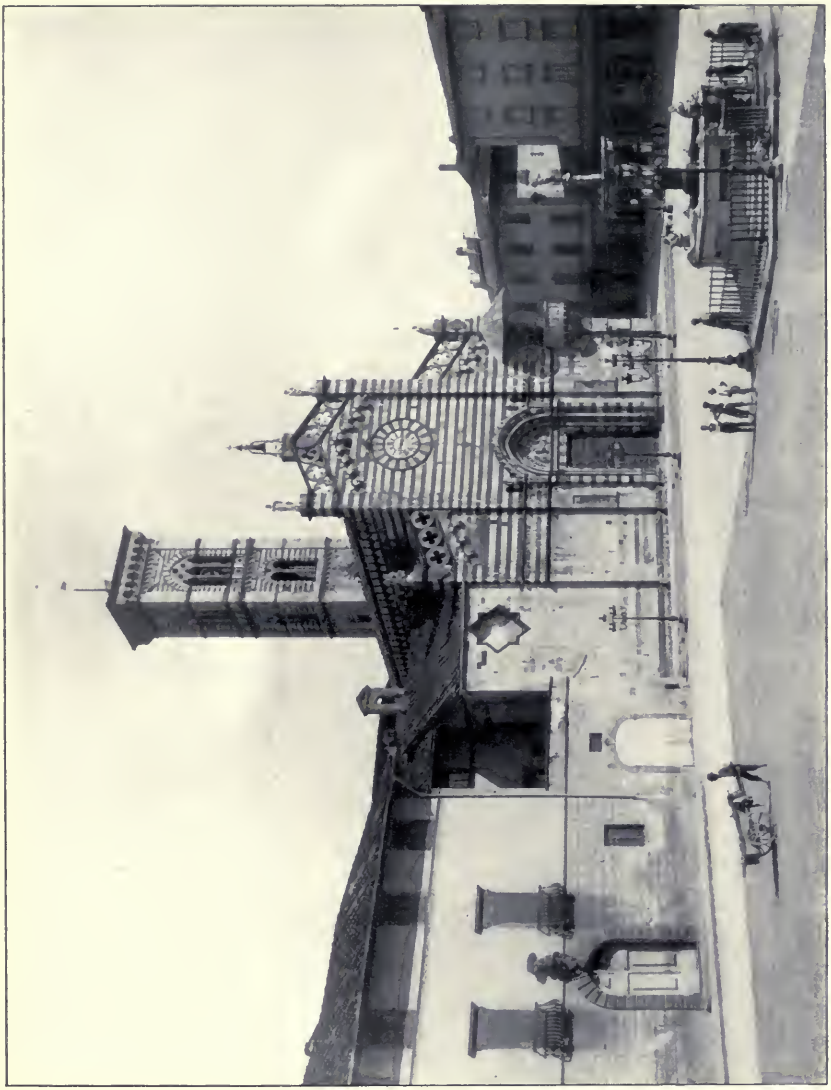
PRATO CATHEDRAL

ITALY

Historical Note.—This cathedral was begun in the twelfth century, and completed early in the fourteenth century. The façade dates from the fifteenth century.

Architectural Note.—The cathedral was begun in the Tuscan-Romanesque style, and finished in the Gothic style.

General Note.—The exquisite open-air pulpit, sculptured by Donatello and Michelozzo, was erected for displaying to the people the Girdle of the Virgin (Sacra Cintŏla), which is kept in the cathedral. The girdle is said to have been brought from the Holy Land by a knight of Prato in the twelfth century.



Alinari.

SIENA CATHEDRAL

ITALY

Historical Note.—This cathedral was begun in the early part of the thirteenth century. It was enlarged in 1317, and again in 1339 a new scheme of enlargement was commenced, but the design was never fully carried out. The west front was finished in 1380. The Campanile dates from the fourteenth century.

Architectural Note.—The building has a nave and aisles extending to the choir, and intersected by double transepts; the hexagonal dome which surmounts the structure is a notable feature. The façade is striped in red, black and white; it has three portals, the arches over which are of equal size, and a rose window. The Baptistery, San Giovanni di Siena, is under the cathedral to the east, in a natural hollow.

General Note.—Amongst the many valuable art treasures in this cathedral is Niccolo Pisano's pulpit, which had a marked influence on Italian sculpture. The famous pavement of the cathedral is unique; it is inlaid in colours, and in black and white with Biblical and allegorical subjects. For a complete description of this wonderful work Mr. R. H. Hobart Cust's 'Pavement Masters of Siena' should be consulted.

Alinari.

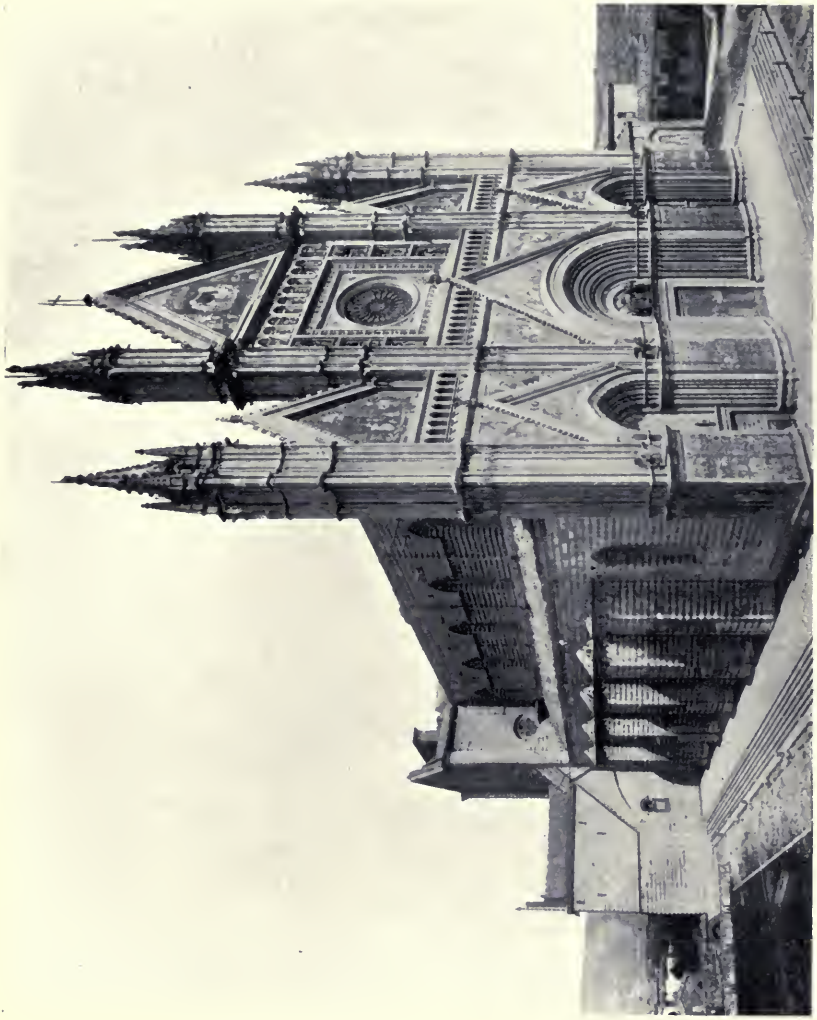
ORVIETO CATHEDRAL

ITALY

Historical Note.—The foundation-stone of this cathedral was laid by Nicholas IV. in 1290, and in 1309 the work was sufficiently far advanced for Mass to be celebrated in the building.

Architectural Note.—Orvieto Cathedral was designed by Lorenzo Maitani, the architect who designed the front of Siena Cathedral. Within and without, the walls are striped. The spacious rectangular nave suggests a basilican plan.

General Note.—This cathedral, rich in some of the finest frescoes and sculpture in Italy, was built to commemorate a miracle by which bloodstains are said to have appeared on a consecrated wafer to induce a sceptical priest to believe in the doctrine of Transubstantiation. The miraculous wafer is preserved in a silver shrine which is a magnificent example of early silver work.



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CAMPO SANTO, PISA

ITALY

HISTORICAL NOTE.—The Campo Santo, or Burial-Ground of Pisa, was founded in the early years of the thirteenth century. The beautiful cloisters which surround the cemetery were designed by Giovanni Pisano; they were begun about 1278, but were not finished till the fifteenth century.

ARCHITECTURAL NOTE.—The cloisters are in the Tuscan Gothic style. It will be observed that the tracery of the Pointed style is contained by round arches. The interior walls of the cloisters enclosing the court are decorated with interesting frescoes.

GENERAL NOTE.—In 'The Ecclesiastical Architecture of Italy' H. G. Knight very aptly suggests that 'the Campo Santo would afford an excellent model for the last repository of the illustrious men of any great country. The public monuments might be sheltered by the roof, and ranged against the walls of the cloisters, and, placed in such a situation, would be seen more conveniently, and to greater advantage, than within a church.'

Brogi.

SANTA MARIA NOVELLA, FLORENCE

ITALY

Historical Note.—This church was commenced in 1278. The façade was begun in 1350, and finished, with the exception of the top of one side, in the fifteenth century.

Architectural Note.—This church is in the form of a T. Clustered columns divide the nave and aisles, and the greater distance between the columns near the door than between those approaching the altar, together with the two steps leading up to the choir, are applications of the laws of perspective, which give an impression of vastness. The façade is faced with black and white marble in the characteristic Italian style.

General Note.—This church is celebrated for its beautiful frescoes by Masaccio, Ghirlandajo, and Giotto. It also contains the famous Cimabue Madonna, the first painting of the Virgin in which an attempt was made to break away from the conventional stiffness of the Byzantine school. The cloisters are spacious and grand, and the simple architecture of the Gothic Spanish Chapel attached to this church is fascinating to a degree. Ruskin, in his 'Mornings in Florence,' gives a most interesting critical study of Santa Maria Novella.

Alinari.

THE CATHEDRAL OF SANTA MARIA DEL FIORE

FLORENCE, ITALY

Historical Note.—This cathedral was commenced in 1298 on the site of an earlier one. The first architect was Arnolfo, who directed the works until his death, when building operations ceased for some years owing to civil factions. In 1332 Giotto took control of the work. In 1418 the solution of the problem of executing the dome was set for public competition, and Brunelleschi's plan was accepted; his dome was finished in 1434, and the church was consecrated soon after. The façade is modern.

Architectural Note.—The interior is divided into nave, with two aisles, and apse. Bearing in mind the magnificent exterior, the internal effect is very bare, and the first feeling it inspires is one of disappointment.

General Note.—The Campanile, or Giotto's Tower, was begun by Giotto in 1334, but he did not live to see its completion. The harmonious proportions of this building justify its fame as an artistic triumph. Ruskin, who speaks of this tower as 'the model and mirror of perfect architecture,' says: 'The characteristics of Power and Beauty occur more or less in different buildings—some in one and some in another. But all together, all in their highest possible relative degrees, they exist, as far as I know, only in one building in the world—the Campanile of Giotto at Florence.'

Alinari.

MILAN CATHEDRAL

ITALY

HISTORICAL NOTE.—This cathedral was begun in 1386, and was consecrated in 1577. The façade is modern.

ARCHITECTURAL NOTE.—Milan Cathedral is in the form of a cross, with nave, double aisles, and transepts with aisles. The roof is borne by fifty-two columns, which, instead of capitals, have niches enclosing statues. The whole structure is built of white marble. German influence is very noticeable in this building, and many German masons are thought to have aided in the work.

GENERAL NOTE.—After Seville, Milan Cathedral is the largest mediæval cathedral ever erected.

Brogi.

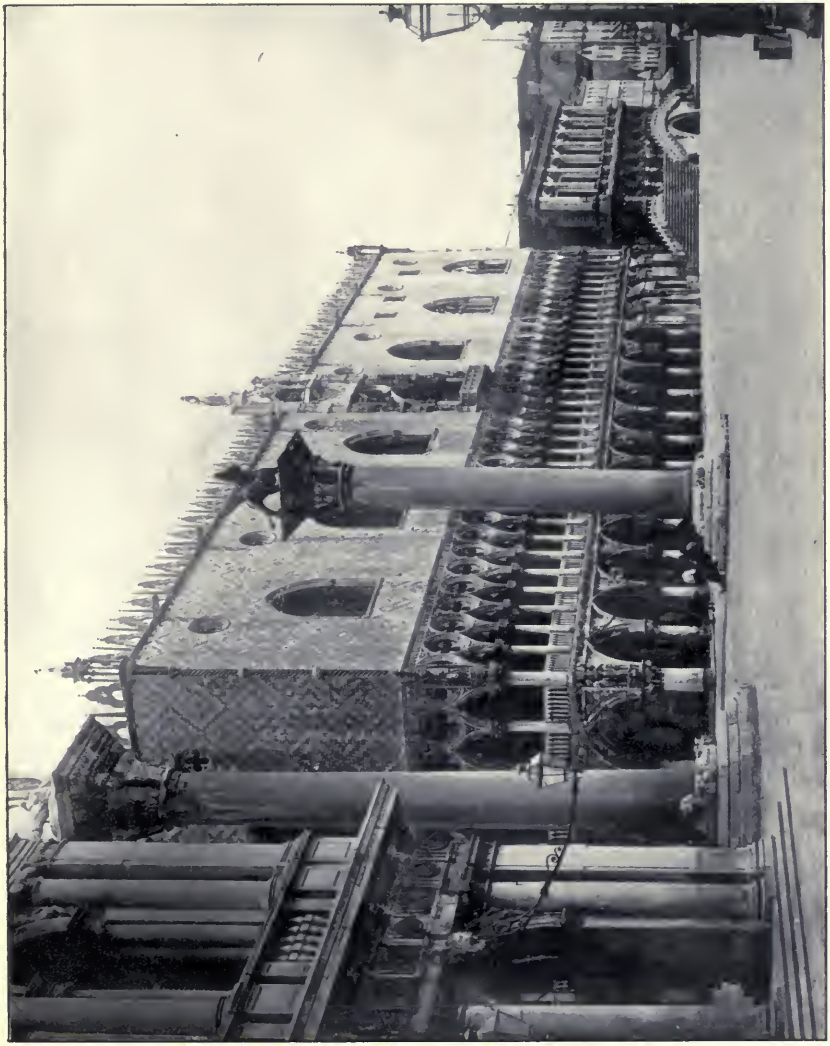
DOGE'S PALACE, VENICE

ITALY

HISTORICAL NOTE.—This palace is said to have been originally built about 814 for the first Doge of Venice. Extensive restorations followed two fires; the south part dates from the fourteenth century, and the west façade from the fifteenth century.

ARCHITECTURAL NOTE.—'The Doge's Palace is the grandest effort in civic architecture of the period. . . . The structure is built with rose-coloured and white marble, the blank walls of the upper story being a chequer of these colours broken by a few large and richly ornamented windows. The delicate and light carving in low relief which occurs in the capitals of the arcade is justly celebrated. Notice that the lower columns seem to rise out of the ground, having no bases; also the solid and connected character of the tracery, which gives some stability to the design, so heavily loaded above' (Banister Fletcher). In Ruskin's 'Stones of Venice' will be found much interesting criticism of this palace.

GENERAL NOTE.—The Doge's Palace is connected with the sixteenth century prison by the Bridge of Sighs, which spans the narrow canal between them. The prison appears in the right-hand corner of our illustration, close by the pedestrians' bridge over the canal.



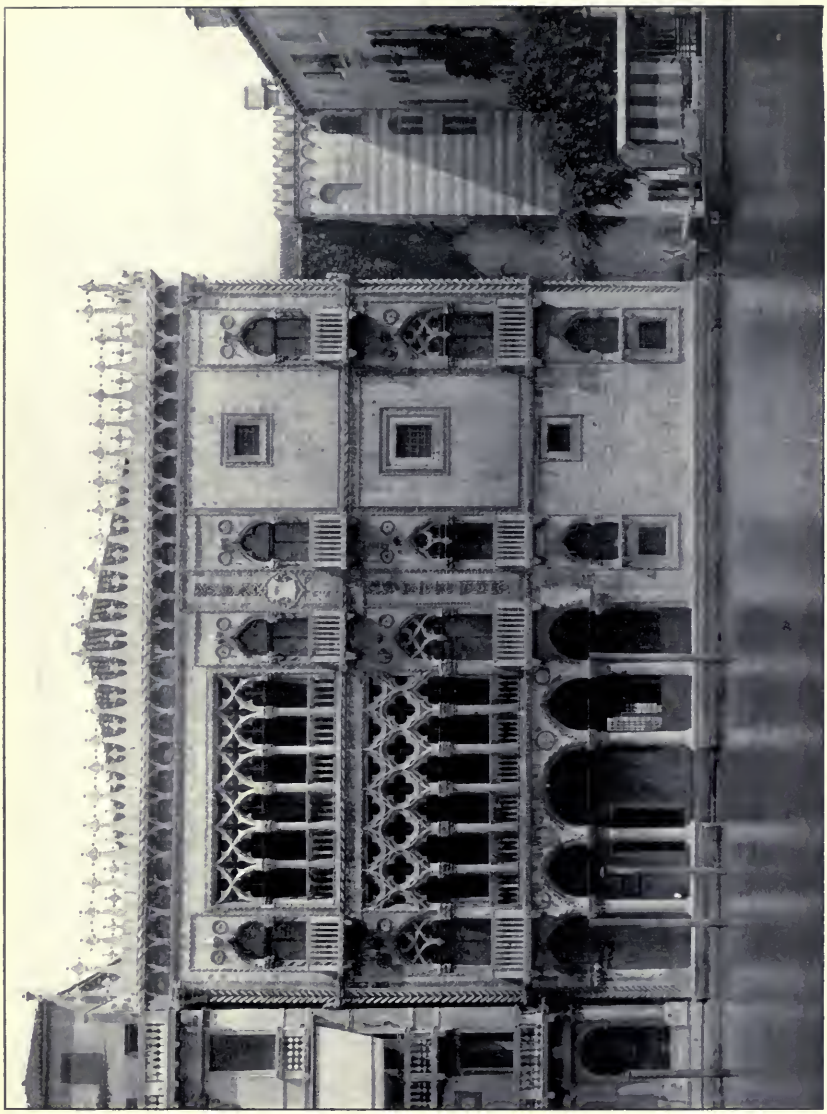
CA D'ORO PALACE, VENICE

ITALY

HISTORICAL NOTE.—This palace dates from the fourteenth century.

ARCHITECTURAL NOTE.—Banister Fletcher remarks that 'the tracery especially is Venetian in character, as is also the grouping of the windows towards the centre of the façade, the extremities of the design being left comparatively solid, thus producing the effect of a central feature inclosed by wings.' These wings offered a surface for the colour decoration so beloved by the Venetians.

GENERAL NOTE.—In his 'Brick and Marble in the Middle Ages,' G. E. Street gives a general description of a Venetian palace, and remarks that 'one especial fault of the Venetians seems to have been their proneness to repeat the same architectural idea an infinite number of times.' He accounts for this by the explanation that Venice, being surrounded by water, was 'cut off from that emulation which in other places always has the effect of producing life and change very rapidly in the phases of art.'



Brogi.

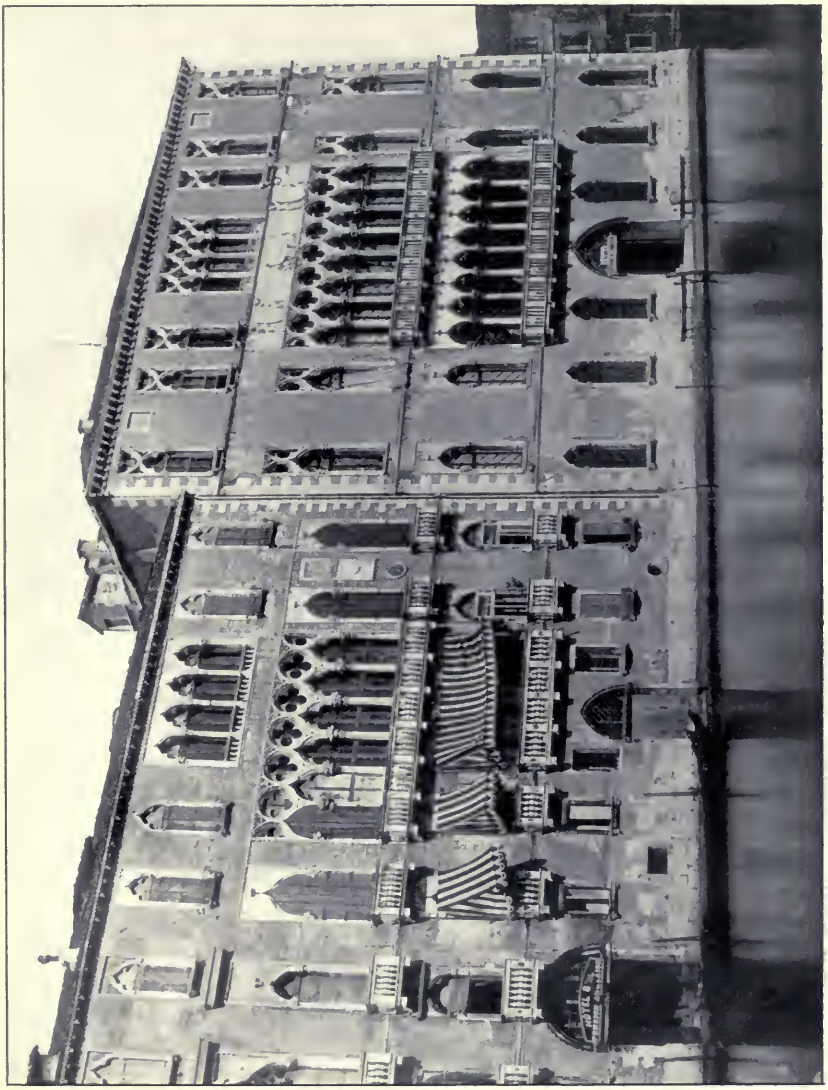
FOSCARI PALACE, VENICE

ITALY

HISTORICAL NOTE.—This palace is fifteenth-century work. The upper story was added by Doge Francesco Foscari.

ARCHITECTURAL NOTE.—This palace is considered to be one of the very finest examples in Venice of fifteenth-century Gothic.

GENERAL NOTE.—Francesco Foscari, Doge of Venice, was born about 1372, and died in 1457. During the time that he was at the head of Florentine affairs he was engaged in carrying on war against the powerful Duke of Milan. The Doge was called upon to pass sentence upon his own son, who was accused of one of the worst offences a noble could commit—receiving presents from foreign Princes—and tortured into confession before his father. Through the machinations of an enemy the aged Foscari was asked to abdicate. On the way down the Giants' Staircase of the Doge's Palace, after he had been expelled, he said: 'My services brought me within these walls; the malice of mine enemies drives me away.' He died shortly afterwards, broken-hearted, and the great bell of St. Mark's, which rung in his successor, tolled his death-knell. The story of the Foscari was taken by Byron as the theme of a tragedy.



Naya.

BURGOS CATHEDRAL

SPAIN

HISTORICAL NOTE.—This cathedral was begun in the early half of the thirteenth century, and completed in 1567.

ARCHITECTURAL NOTE.—Burgos Cathedral 'is now a vast congeries of chapels and excrescences of every shape and every style, which have grown round it at various dates, and, to a great extent, concealed the whole of the original plan and structure, and of these the only valuable mediæval portions are the cloisters and sacristies, which are, indeed, but little later in date than the church, and two of the chapels on the north side of the chevet, one of which is original and the other, at any rate, not much altered. The rest of the additions are all either of the latest Gothic or of Renaissance' ('Gothic Architecture in Spain,' G. E. Street).

GENERAL NOTE.—The usual position of the choir, or *coro*, in Spanish churches is in the nave; the *trascoro* is the part of the nave west of the *coro; entre los dos coros* is the part east of the *coro;* the entrance to the *coro* is called *capilla mayor;* the screens across the same are known by the name of *rejas;* and the lantern is termed the *cimborio.*

Laurent.

SEVILLE CATHEDRAL

SPAIN

Historical Note.—This cathedral is built on the site of a mosque of the same dimensions. It was commenced in 1401, and finished in 1520.

Architectural Note.—'The peculiarity of plan was no doubt caused by the structure being made to fill up the space occupied previously by a mosque. It is typically Spanish in having a rectangular outline; it differs from most of the great Continental churches in having a square east end and not an apse. Compared with Westminster Abbey (the highest stone-vaulted building in England), we find that the nave of the Abbey is the same height and width, practically, as one of the four side aisles of Seville, while the bays of the nave arcade of Westminster are but half the span. The length of the Abbey is slightly under that of Seville. Thus, one aisle of Seville represents the size of the nave and choir of the Abbey, which is repeated four times at Seville; in addition to which there is the great nave, 55 feet wide from centre to centre of pier and 130 feet high. Surrounding the church, and of the same depth as the aisles, are the ring of chapels' (Banister Fletcher).

General Note.—Seville Cathedral is the largest mediæval cathedral ever erected.

Laurent.

TOWN HALL, GHENT

BELGIUM

Historical Note.—The Gothic part of the Hôtel de Ville dates from the fifteenth century; the Renaissance part from the latter end of the sixteenth and beginning of the seventeenth centuries.

Architectural Note.—The Renaissance part of the Town Hall is a good example of early Renaissance work in Belgium; the Gothic portion is ornamented in the extravagant manner which characterizes the late Pointed style.

General Note.—This building affords an excellent opportunity for contrasting the Gothic style of architecture and the Renaissance style which succeeded it.

Levy et ses Fils.

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